



September 14, 2022

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

**Re: Remediation Work Plan  
Leamex 8  
Incident Number NAPP2200641724  
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared the following Remediation Work Plan (RWP) to document the site assessment and soil sampling activities completed to date and proposes a work plan to address the impacted soil identified at the Leamex 8 (Site). The purpose of the site assessment and soil sampling activities was to delineate the vertical extent of impacted soil resulting from a release of produced water at the Site. The following RWP proposes excavation of the impacted soil in the top 4 feet and installation of a depth to water boring to confirm the Closure Criteria at the Site.

## **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit M, Section 24, Township 17 South, Range 33 East, in Lea County, New Mexico (32.816111° N, 103.621202° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On December 20, 2021, a leak from an underground main injection line resulted in the release of approximately 104 barrels (bbls) of produced water into the pasture area where fluids pooled. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 100 bbls of produced water were recovered. The previous operator (ConocoPhillips Company) reported the release immediately via email to the New Mexico Oil Conservation Division (NMOCD) on December 21, 2021, and submitted a Release Notification Form C-141 (Form C-141) on January 6, 2022. The release was assigned Incident Number NAPP2200641724.

## **SITE CHARACTERIZATION AND CLOSURE CRITERIA**

The Site was characterized 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). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-14594, located approximately 0.9 miles northeast of the Site. The groundwater well has a reported depth to groundwater of 180 feet bgs and a total depth of 300 feet bgs. All wells used for depth to water determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 1,090 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.

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

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

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

## **SITE ASSESSMENT AND DELINEATION ACTIVITIES**

On December 29, 2021 and March 16, 2022, personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. A total of 10 preliminary soil samples (SS01 through SS10) were collected within the release extent at depths ranging from 0.25 feet to 0.5 feet bgs. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

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

Laboratory analytical results for preliminary soil samples SS02 through SS07 indicated concentrations of chloride exceeded the Site Closure Criteria. Laboratory analytical results for preliminary soil samples SS01 through SS08, and SS10 indicated chloride concentrations exceeded the reclamation

requirement. Laboratory analytical results for preliminary soil sample SS09 indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement.

Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation activities appeared warranted.

Between March 17 and 22, 2022, delineation activities were conducted at the Site to assess the vertical extent of impacted soil. Potholes PH01 through PH06 were advanced via track mounted backhoe within the release extent in the vicinity of preliminary soil samples SS01, SS02, SS04, SS06, SS08 and SS10. The delineation potholes were advanced to depths ranging from 1-foot to 9 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 9 feet bgs. Soil from the potholes were field screened for VOCs and chloride. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil samples were handled and analyzed as described above. The delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH06 at depths ranging from 1-foot to 9 feet bgs, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria, but exceeded the reclamation requirement for chloride at depths ranging from the ground surface to 3.5 feet bgs. Laboratory analytical results indicated the Site is vertically delineated to the most stringent Table 1 Closure Criteria in all delineation pothole locations. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

## PROPOSED REMEDIATION WORK PLAN

While impacted soil has been detected at the ground surface as indicate by preliminary surface soil samples SS02 through SS07 exceeding the Site Closure Criteria, waste containing soil has been identified throughout the release extent to a maximum depth of 3.5 feet bgs as indicated by analytical results in all potholes samples, which concentrations of chloride and/or TPH exceeded the reclamation requirement. As a result, Maverick proposes excavation of impacted and waste-containing soil in the top 4 feet and installation of a depth to water boring to confirm the Closure Criteria at the Site.

Maverick requests approval to complete the following remediation activities:

- Excavation of chloride and TPH impacted soil in the top 4 feet. Excavation will proceed laterally until sidewall samples confirm chloride and TPH concentrations are compliant with the reclamation requirement in the top 4 feet.
- Due to the estimated 14,500 square foot size of the excavation, Maverick requests a variance for frequency of excavation confirmation samples. Maverick proposes the frequency of confirmation sampling for the excavation floor to be decreased from every 200 square feet (approximately 73 samples) to every 500 square feet (approximately 29 samples). Each 5-point composite floor sample will represent a 500 square foot area. Sidewall samples will be collected at a frequency of every 200 square feet. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation samples will be analyzed for BTEX, TPH, and chloride.
- An estimated 2,500 cubic yards of impacted soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved Bureau of Land Management (BLM) seed mixture.

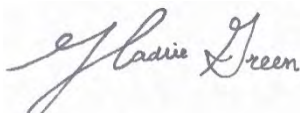
- In order to confirm depth to groundwater is greater than 100 feet bgs at the Site and confirm the applied Closure Criteria, Maverick proposes to complete a depth to water boring within 0.5 miles of the release. The soil boring will be advanced to a depth of approximately 105 feet bgs or until groundwater is encountered. An Ensolum geologist will log and describe soils continuously and will document observations on a lithologic/ soil sampling log. The borehole will be left open for at least 72 hours to allow for the potential slow infill of groundwater. Following the 72-hour waiting period, depth to groundwater will be measured or the Ensolum geologist will confirm the boring is dry. The borehole will be properly abandoned following NMOSE plugging and abandonment procedures. Maverick will include documentation of the soil boring installation and lithologic/ soil sampling log in the subsequent deliverable.

Maverick will complete the excavation activities within 90 days of the date of approval of this RWP by the NMOCD. A report detailing remedial actions will be submitted within 30 days of receipt of laboratory analytical results and completion of drilling activities. The depth to water soil boring will be completed as soon as possible following approval from the surface landowner (New Mexico State Land Office), receipt of the NMOSE drilling permit, and scheduling with a driller, which could impact the time to drill based on availability.

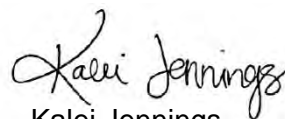
Maverick believes the scope of work described above will meet requirements set forth in 19.15.29.13 NMAC and are protective of human health, the environment, and groundwater. As such, Maverick respectfully requests approval of this RWP from NMOCD.

If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or [kjennings@ensolum.com](mailto:kjennings@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Hadlie Green  
Staff Geologist



Kalei Jennings  
Senior Scientist

cc: Bryce Wagoner, Maverick Natural Resources  
New Mexico State Land Office

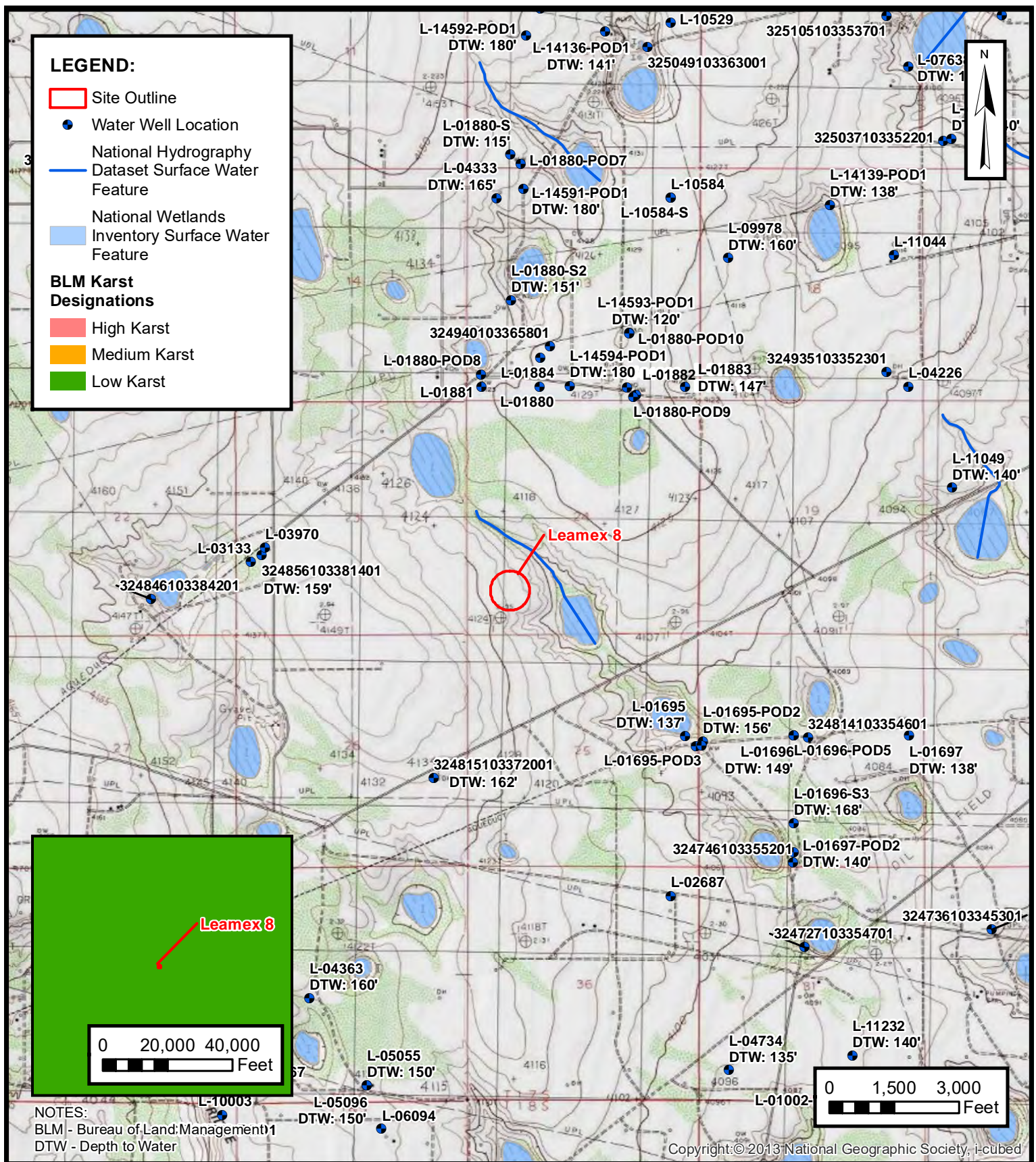
Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation





FIGURES

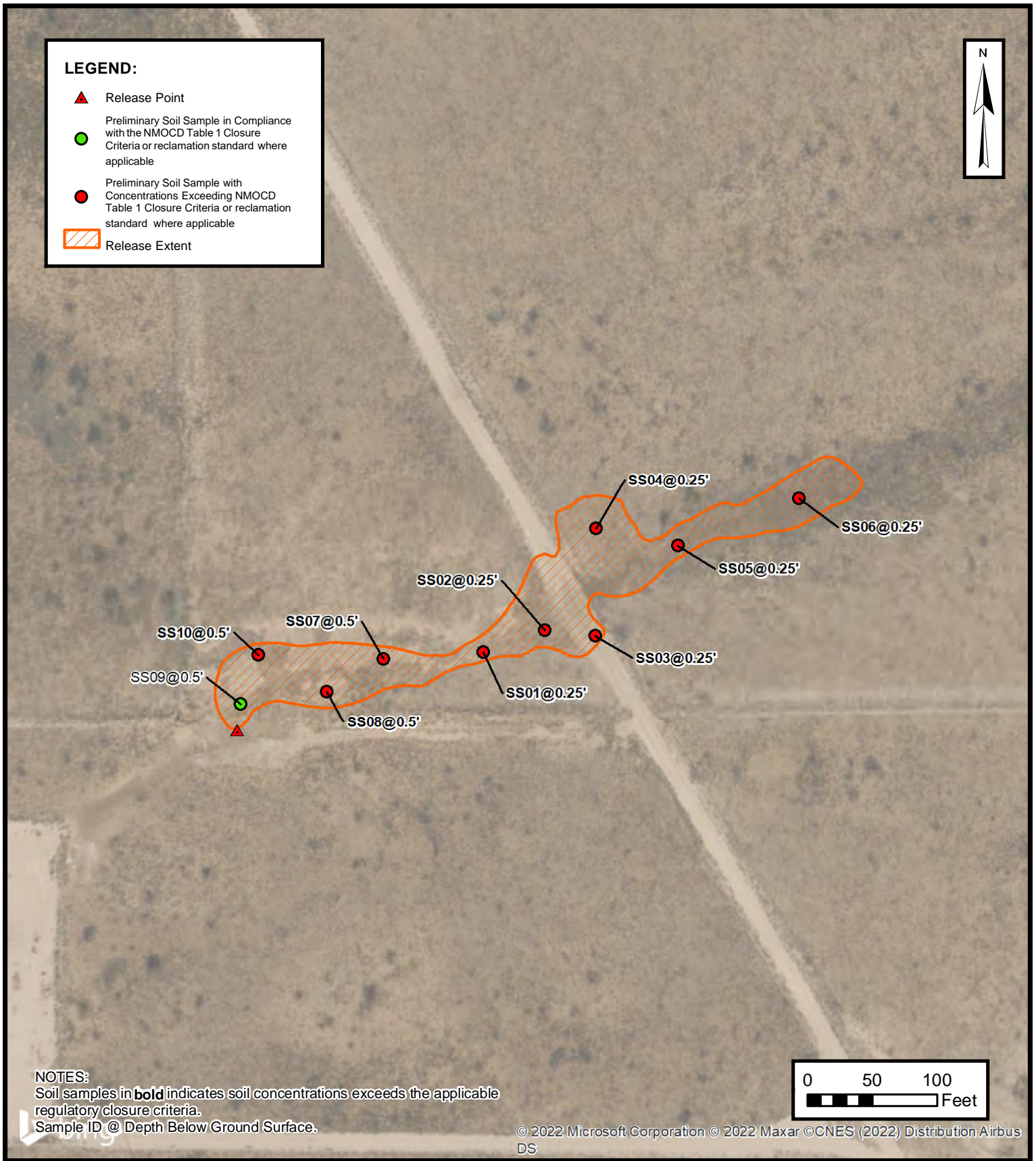


### SITE RECEPTOR MAP

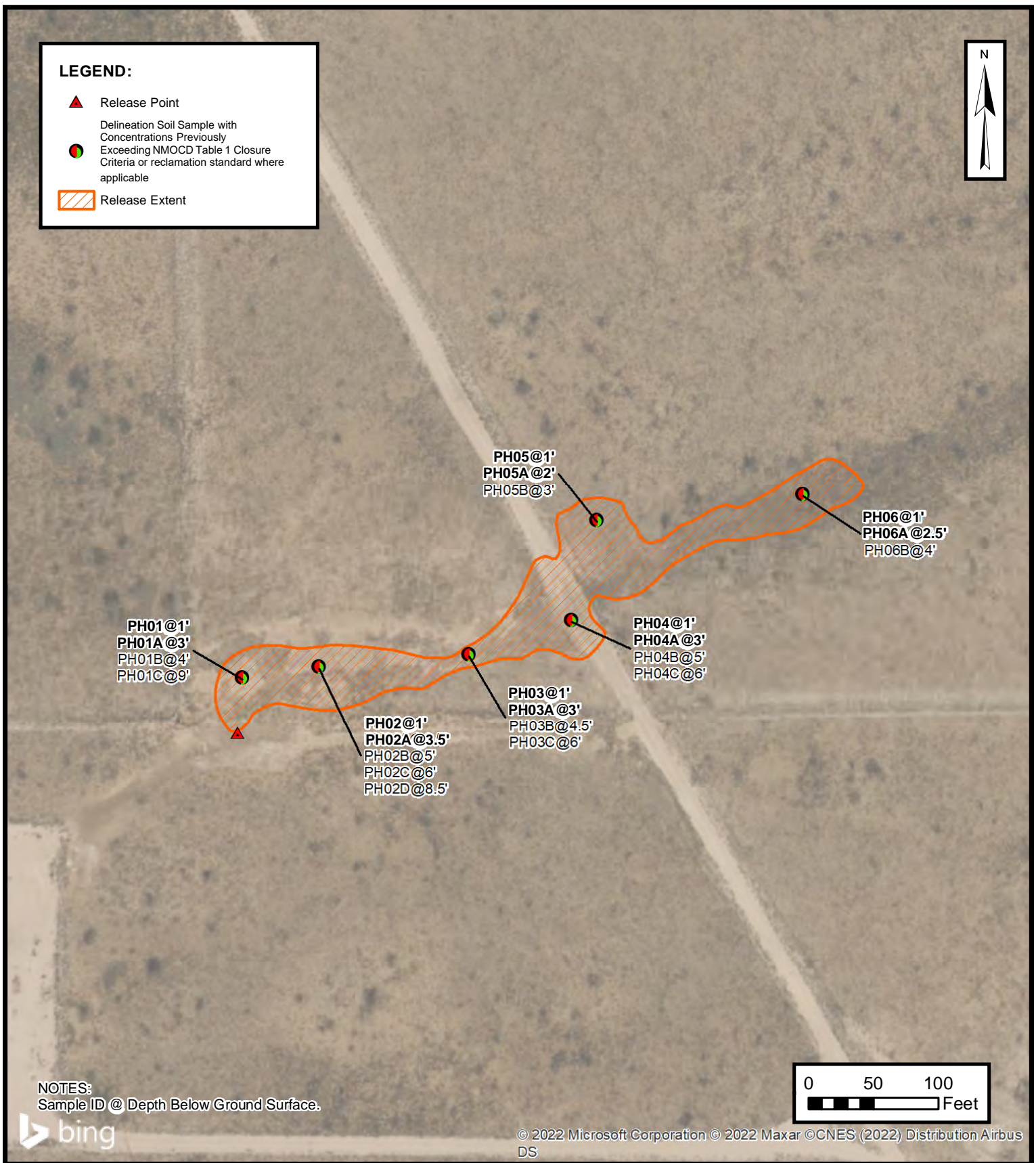
MAVERICK NATURAL RESOURCES, LLC  
LEAMEX 8  
NAPP2200641724  
Unit M, Sec 24, T17S, R33E  
Lea County, New Mexico

**FIGURE**  
**1**











TABLES





**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Leamex 8  
 ConocoPhillips Company  
 Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Assessment Soil Samples										
SS01	12/29/2021	0.25	<0.0402	<0.0805	<49.9	<49.9	<49.9	<49.9	<49.9	19,300*
SS02	12/29/2021	0.25	0.042	0.129	<49.9	<49.9	<49.9	<49.9	<49.9	29,400*
SS03	12/29/2021	0.25	<0.0402	<0.0803	<50.0	<50.0	<50.0	<50.0	<50.0	40,500*
SS04	12/29/2021	0.25	<0.0396	<0.0792	<50.0	<50.0	<50.0	<50.0	<50.0	24,100*
SS05	12/29/2021	0.25	<0.0398	<0.0795	<50.0	<50.0	<50.0	<50.0	<50.0	31,800*
SS06	12/29/2021	0.25	<0.0398	<0.0795	<49.9	<49.9	<49.9	<49.9	<49.9	22,400*
SS07	03/16/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	22,700*
SS08	03/16/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	17,500*
SS09	03/16/2022	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	21.3*
SS10	03/16/2022	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	16,100*
Delineation Soil Samples										
PH01	03/17/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	6,440*
PH01A	03/21/2022	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	5,140*
PH01B	03/21/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,480
PH01C	03/22/2022	9	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	593
PH02	03/17/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	5,470*
PH02A	03/21/2022	3.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	797*
PH02B	03/21/2022	5	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	3,000
PH02C	03/22/2022	6	<0.00198	<0.00396	<50.0	<50.0	71.6	<50.0	71.6	1,810
PH02D	03/22/2022	8.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	67.1
PH03	03/17/2022	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	7,450*
PH03A	03/21/2022	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	3,250*
PH03B	03/21/2022	4.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	1,270
PH03C	03/21/2022	6	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	504
PH04	03/17/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	9,160*
PH04A	03/17/2022	3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,650*
PH04B	03/17/2022	5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	329
PH04C	03/21/2022	6	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	124



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Leamex 8  
 ConocoPhillips Company  
 Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
PH05	03/22/2022	1	<0.00200	<0.00401	<49.7	136	<49.7	136	136*	34.7*
PH05A	03/22/2022	2	<0.00200	<0.00401	<50.0	97.8	<50.0	97.8	97.8	68.5*
PH05B	03/22/2022	3	<0.00202	<0.00404	<49.9	63.8	<49.9	63.8	63.8	53.0*
PH06	03/17/2022	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	5,580*
PH06A	03/22/2022	2.5	<0.00201	<0.00402	<49.9	73.0	<49.9	73.0	73.0	1,980*
PH06B	03/22/2022	4	<0.00199	<0.00398	<49.8	50.4	<49.8	50.4	50.4	372

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

\* indicates sample was collected in area to be reclaimed after remediation is complete; reclamation standard for chloride in the top 4 feet is 600 mg/kg

Grey text represents samples that have been excavated




## APPENDIX A

### Referenced Well Records



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tw</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
NA	L 14594 POD1	4	4	3	13	17S	33E	629387	3633116 

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**Driller License:** 1261      **Driller Company:** DARRELL CRASS DRILLING CO., INC

**Driller Name:** CRASS, DARRELL

**Drill Start Date:** 02/25/2019      **Drill Finish Date:** 02/28/2019      **Plug Date:**

**Log File Date:** 05/13/2019      **PCW Rev Date:**      **Source:** Shallow

**Pump Type:**      **Pipe Discharge Size:**      **Estimated Yield:**

**Casing Size:** 8.62      **Depth Well:** 300 feet      **Depth Water:** 180 feet

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**Water Bearing Stratifications:**

Top	Bottom	Description
180	200	Sandstone/Gravel/Conglomerate
200	240	Sandstone/Gravel/Conglomerate
240	260	Sandstone/Gravel/Conglomerate

---

**Casing Perforations:**

Top	Bottom
160	260

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/29/21 11:30 AM

POINT OF DIVERSION SUMMARY



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## National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category:  Geographic Area:

Click to hide News Bulletins

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

# USGS 324856103381401 17S.33E.23.313242

Available data for this site

## Well Site

### DESCRIPTION:

Latitude 32°49'04", Longitude 103°38'24" NAD27  
Lea County, New Mexico , Hydrologic Unit 13070007  
Well depth: 230 feet  
Land surface altitude: 4,144.60 feet above NGVD29.  
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.  
Well completed in "Ogallala Formation" (121OGLL) local aquifer

### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1961-03-10	1976-03-02	4
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

### OPERATION:

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

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[Questions about sites/data?](#)

[Feedback on this web site](#)

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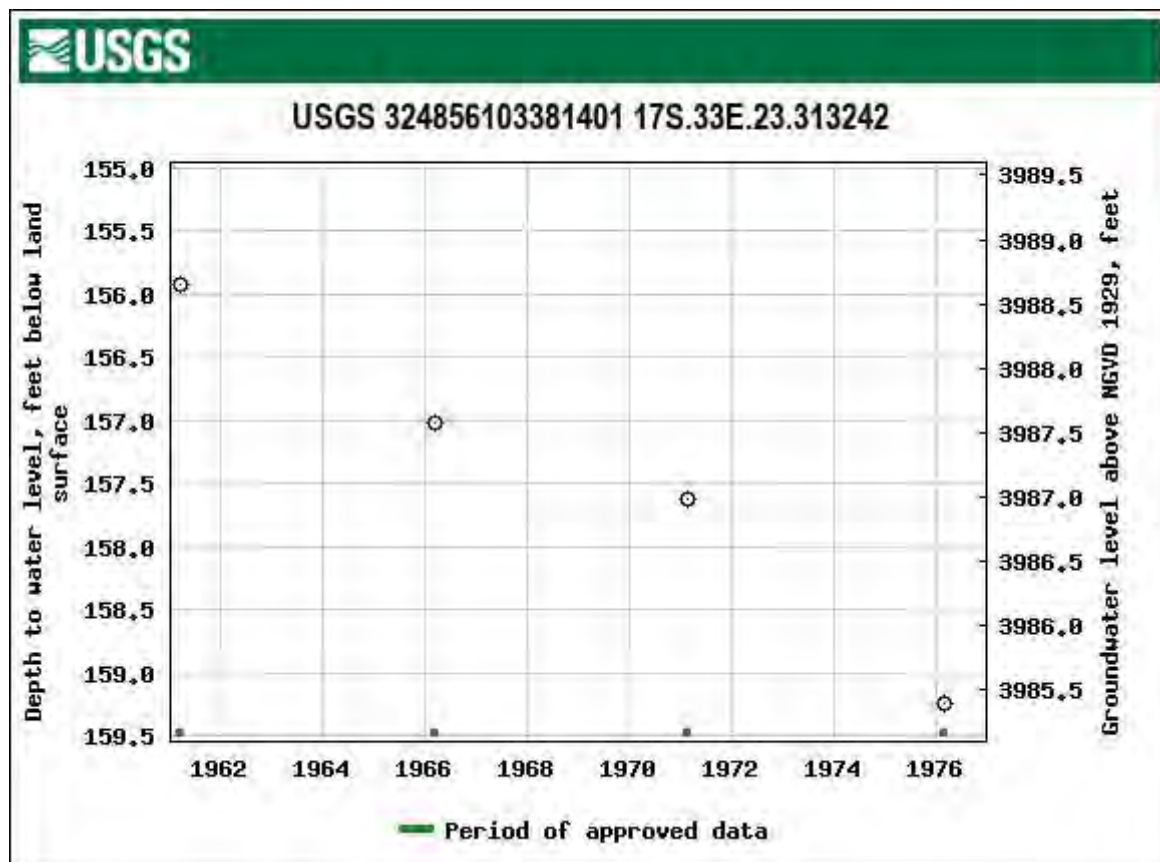
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[Explanation of terms](#)

[Subscribe for system changes](#)

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## APPENDIX B

### Photographic Log



**Photographic Log**

Maverick Natural Resources, LLC

Leamex 8

Incident Number NAPP2200641724



Photograph 1

Date: December 29, 2021

Description: Photo of release extent taken during initial assessment.



Photograph 2

Date: December 29, 2021

Description: Photo of release extent taken during initial assessment.



Photograph 3

Date: March 17, 2022

Description: Photo of PH01 taken during delineation activities.



Photograph 4


Date: March 22, 2022

Description: Photo of PH05 taken during delineation activities.





## APPENDIX C


### Lithologic Soil Sampling Logs


		Sample Name: <b>PH01</b>		Date: <b>03/17-22/2022</b>				
		Site Name: <b>Leamex 8 Battery</b>						
		Incident Number: <b>NAPP2200641724</b>						
		Job Number: <b>03D2024027</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: <b>32.8158335, -103.6221005</b>				Logged By: <b>HG</b>				
				Method: <b>Backhoe</b>				
				Hole Diameter: <b>NA</b>				
				Total Depth: <b>10'</b>				
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	11,536	0.0	N	PH01	1	1	CCHE	CALICHE, dark brown, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.
D	14,604	0.2	N			2	CCHE	SAA, more white sand.
D	9,184	0.0	N	PH01A	3	3	CCHE	SAA
D	4,183	0.0	N	PH01B	4	4	CCHE	SAA, light tan-brown.
D	6,787	0.0	N			5	CCHE	SAA, light tan-gray.
D	3,354	0.0	N			6	CCHE	SAA
D			N			7	CCHE	SAA, more silt and sand, less caliche gravel.
D	4,944	0.0	N			8	SP-SM	SAND, light tan, abundant sil and caliche gravel, small to large angular clasts, poorly sorted, poorly graded, fine grain, no stain, no odor.
D	683.2	0.0	N	PH01C	9	9	SP-SM	SAA
						10		
TD @ 9 feet bgs								




								Sample Name: <b>PH02</b>		Date: <b>03/17-22/2022</b>	
								Site Name: <b>Leamex 8 Battery</b>			
								Incident Number: <b>NAPP2200641724</b>			
								Job Number: <b>03D2024027</b>			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: <b>HG</b>		Method: <b>Backhoe</b>	
Coordinates: <b>32.8158430, -103.6219262</b>								Hole Diameter: <b>NA</b>		Total Depth: <b>8.5'</b>	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0					
D	9,906	0.1	N	PH02	1	1	CCHE	CALICHE, dark brown, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.			
D			N			2	CCHE	SAA, more white sand.			
D			N			3	CCHE	SAA			
	11,536	0.0	N	PH02A	3.5	3.5	CCHE	CALICHE, light tan-dark brown, abundant silt and sand, smaller angular clasts, poorly graded, poorly sorted, no stain, no odor.			
D			N		4	4	CCHE				
D	4,944	0.0	N	PH02B	5	5	CCHE	SAA			
D	3,505	0.0	N			5.5	CCHE	SAA, light gray-tan.			
D	3,830	0.0	N	PH02C	6	6	CCHE	SAA			
D			N			7	CCHE	SAA, more silt and sand, less caliche gravel.			
D	896	0.0	N			8	SP-SM	SAND, light tan, abundant sil and caliche gravel, small to large angular clasts, poorly sorted, poorly graded, fine grain, no stain, no odor.			
D	<179.2	0.0	N	PH02D	8.5	8.5	SP-SM	SAA			
TD @ 8.5 feet bgs											

								Sample Name: <b>PH03</b>		Date: <b>03/17-21/2022</b>	
								Site Name: <b>Leamex 8 Battery</b>			
								Incident Number: <b>NAPP2200641724</b>			
								Job Number: <b>03D2024027</b>			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: <b>HG</b>		Method: <b>Backhoe</b>	
Coordinates: <b>32.8158711, -103.6215582</b>								Hole Diameter: <b>NA</b>		Total Depth: <b>6'</b>	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0					
D	14,604	0.2	N	PH03	1	1	CCHE	CALICHE, light tan, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.			
D			N			2	CCHE	SAA, more white sand.			
D	5,807	0.1	N	PH03A	3	3	CCHE	SAA			
D			N		4	4	CCHE	SAA			
D	2,895	0.0	N	PH03B	4.5	4.5					
D			N			5	CCHE	SAA			
D	1,058	0.0	N			5.5	CCHE	SAA, light tan-white.			
D	1,646	0.0	N	PH03C	6	6	CCHE	SAA			
TD @ 6 feet bgs											

		Sample Name: <b>PH04</b>		Date: <b>03/17-21/2022</b>				
		Site Name: <b>Leamex 8 Battery</b>						
		Incident Number: <b>NAPP2200641724</b>						
		Job Number: <b>03D2024027</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: <b>32.8159417, -103.6213032</b>			Logged By: <b>HG</b>		Method: <b>Backhoe</b>			
			Hole Diameter: <b>NA</b>		Total Depth: <b>6'</b>			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	14,604	0.1	N	PH04	1	1	CCHE	CALICHE, dark brown, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.
D	7,901	0.0	N			2	CCHE	SAA
D	7,901	0.0	N			2.5	CCHE	SAA
D	4,944	0.0	N	PH04A	3	3	CCHE	SAA, white-light tan, trace roots.
D	1,657	0.0	N			4	CCHE	SAA, no roots.
D	560	0.0	N	PH04B	5	5	CCHE	SAA, smaller caliche gravel, more silt and sand.
D	212.8	0.0	N	PH04C	6	6	CCHE	CALICHE, white-light tan, abundant silt and sand, abundant angular caliche gravel, poorly sorted, fine grain, poorly graded, no stain, no odor.
						TD @ 6 feet bgs		

								Sample Name: <b>PH05</b>		Date: <b>03/22/2022</b>	
								Site Name: <b>Leamex 8 Battery</b>			
								Incident Number: <b>NAPP2200641724</b>			
								Job Number: <b>03D2024027</b>			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: <b>HG</b>		Method: <b>Backhoe</b>	
Coordinates: <b>32.8161432, -103.6212427</b>								Hole Diameter: <b>NA</b>		Total Depth: <b>3'</b>	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
						0					
D	<179.2	0.6	N	PH05	1	1	CCHE	CALICHE, dark brown, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.			
D	<179.2	0.3	N	PH05A	2	2	CCHE	SAA, gray-brown, smaller caliche gravel.			
D	<179.2	0.1	N	PH05B	3	3	CCHE	SAA			
TD @ 3 feet bgs											



		Sample Name: <b>PH06</b>		Date: <b>03/17-22/2022</b>				
		Site Name: <b>Leamex 8 Battery</b>						
		Incident Number: <b>NAPP2200641724</b>						
		Job Number: <b>03D2024027</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: <b>32.8162023, -103.6207270</b>			Logged By: <b>HG</b>		Method: <b>Backhoe</b>			
			Hole Diameter: <b>NA</b>		Total Depth: <b>4'</b>			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	7,901	0.3	N	PH06	1	1	CCHE	CALICHE, dark brown, abundant silt and sand, large angular caliche clasts, fine grain, poorly sorted, poorly graded, no stain, no odor.
D	7,901	0.1	N			1.5	CCHE	SAA
D			N			2	CCHE	SAA
D	3,063	0.0	N	PH06A	2.5	2.5	CCHE	SAA, light tan-brown.
D			N			3	CCHE	SAA
D			N			3.5	CCHE	SAA
D	442	0.0	N	PH06B	4	4	CCHE	SAA
TD @ 4 feet bgs								



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

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## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-1782-1

Laboratory Sample Delivery Group: 31403720.000 task 27.02

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
1/7/2022 11:12:32 AM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

**Job ID: 890-1782-1****Laboratory: Eurofins Xenco****Narrative****Job Narrative  
890-1782-1****Receipt**

The samples were received on 12/29/2021 3:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

**GC VOA**

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SS01 (890-1782-1) and SS02 (890-1782-2) at 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: 4-Bromofluorobenzene recovery for the following samples were outside control limits: SS01 (890-1782-1) and SS02 (890-1782-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SS03 (890-1782-3), SS04 (890-1782-4), SS05 (890-1782-5) and SS06 (890-1782-6) at 20.0, 20.0, 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15881 and analytical batch 880-15940 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15882 and analytical batch 880-15874 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-1782-1), SS02 (890-1782-2), SS03 (890-1782-3), SS04 (890-1782-4), SS05 (890-1782-5) and SS06 (890-1782-6). 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: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS01

Lab Sample ID: 890-1782-1

Date Collected: 12/29/21 08:58

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:22	20
<b>Toluene</b>	<b>0.0719</b>		0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:22	20
Ethylbenzene	<0.0402	U	0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:22	20
m-Xylene & p-Xylene	<0.0805	U	0.0805	mg/Kg		01/03/22 10:15	01/04/22 00:22	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:22	20
Xylenes, Total	<0.0805	U	0.0805	mg/Kg		01/03/22 10:15	01/04/22 00:22	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	01/03/22 10:15	01/04/22 00:22	20
1,4-Difluorobenzene (Surr)	87		70 - 130	01/03/22 10:15	01/04/22 00:22	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0805	U	0.0805	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/05/22 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 22:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 22:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 22:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	165	S1+	70 - 130	01/03/22 10:55	01/03/22 22:51	1
o-Terphenyl	166	S1+	70 - 130	01/03/22 10:55	01/03/22 22:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>19300</b>		99.0	mg/Kg			01/04/22 15:40	20

Client Sample ID: SS02

Lab Sample ID: 890-1782-2

Date Collected: 12/29/21 09:00

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.0417</b>		0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:43	20
<b>Toluene</b>	<b>0.0874</b>		0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:43	20
Ethylbenzene	<0.0402	U	0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:43	20
m-Xylene & p-Xylene	<0.0805	U	0.0805	mg/Kg		01/03/22 10:15	01/04/22 00:43	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		01/03/22 10:15	01/04/22 00:43	20
Xylenes, Total	<0.0805	U	0.0805	mg/Kg		01/03/22 10:15	01/04/22 00:43	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/03/22 10:15	01/04/22 00:43	20

Eurofins Xenco

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS02

Lab Sample ID: 890-1782-2

Date Collected: 12/29/21 09:00

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	89		70 - 130	01/03/22 10:15	01/04/22 00:43	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.129		0.0805	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/05/22 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 23:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 23:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/03/22 23:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			01/03/22 10:55	01/03/22 23:11	1
o-Terphenyl	144	S1+	70 - 130			01/03/22 10:55	01/03/22 23:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29400		250	mg/Kg			01/04/22 10:45	50

Client Sample ID: SS03

Lab Sample ID: 890-1782-3

Date Collected: 12/29/21 09:02

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		01/03/22 16:00	01/04/22 15:23	20
Toluene	<0.0402	U	0.0402	mg/Kg		01/03/22 16:00	01/04/22 15:23	20
Ethylbenzene	<0.0402	U	0.0402	mg/Kg		01/03/22 16:00	01/04/22 15:23	20
m-Xylene & p-Xylene	<0.0803	U	0.0803	mg/Kg		01/03/22 16:00	01/04/22 15:23	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		01/03/22 16:00	01/04/22 15:23	20
Xylenes, Total	<0.0803	U	0.0803	mg/Kg		01/03/22 16:00	01/04/22 15:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	01/03/22 16:00	01/04/22 15:23	20
1,4-Difluorobenzene (Surr)	84		70 - 130	01/03/22 16:00	01/04/22 15:23	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0803	U	0.0803	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/05/22 14:19	1

Eurofins Xenco

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS03

Lab Sample ID: 890-1782-3

Date Collected: 12/29/21 09:02

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130			01/03/22 10:55	01/03/22 23:32	1
o-Terphenyl	152	S1+	70 - 130			01/03/22 10:55	01/03/22 23:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40500		250	mg/Kg			01/04/22 10:52	50

Client Sample ID: SS04

Lab Sample ID: 890-1782-4

Date Collected: 12/29/21 09:05

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0396	U	0.0396	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
Toluene	<0.0396	U	0.0396	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
Ethylbenzene	<0.0396	U	0.0396	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
m-Xylene & p-Xylene	<0.0792	U	0.0792	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
o-Xylene	<0.0396	U	0.0396	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
Xylenes, Total	<0.0792	U	0.0792	mg/Kg		01/03/22 16:00	01/04/22 15:43	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			01/03/22 16:00	01/04/22 15:43	20
1,4-Difluorobenzene (Surr)	91		70 - 130			01/03/22 16:00	01/04/22 15:43	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0792	U	0.0792	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/05/22 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130			01/03/22 10:55	01/03/22 23:52	1
o-Terphenyl	148	S1+	70 - 130			01/03/22 10:55	01/03/22 23:52	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## Client Sample ID: SS04

## Lab Sample ID: 890-1782-4

Date Collected: 12/29/21 09:05

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24100	F1	250	mg/Kg			01/04/22 11:00	50

## Client Sample ID: SS05

## Lab Sample ID: 890-1782-5

Date Collected: 12/29/21 09:08

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
Toluene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
Ethylbenzene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
m-Xylene & p-Xylene	<0.0795	U	0.0795	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
o-Xylene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
Xylenes, Total	<0.0795	U	0.0795	mg/Kg		01/03/22 16:00	01/04/22 16:04	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			01/03/22 16:00	01/04/22 16:04	20
1,4-Difluorobenzene (Surr)	91		70 - 130			01/03/22 16:00	01/04/22 16:04	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/05/22 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/04/22 00:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/04/22 00:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/04/22 00:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			01/03/22 10:55	01/04/22 00:12	1
o-Terphenyl	144	S1+	70 - 130			01/03/22 10:55	01/04/22 00:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31800		250	mg/Kg			01/04/22 11:24	50

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS06

Lab Sample ID: 890-1782-6

Date Collected: 12/29/21 09:10

Matrix: Solid

Date Received: 12/29/21 15:28

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:24	20
Toluene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:24	20
Ethylbenzene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:24	20
m-Xylene & p-Xylene	<0.0795	U	0.0795	mg/Kg		01/03/22 16:00	01/04/22 16:24	20
o-Xylene	<0.0398	U	0.0398	mg/Kg		01/03/22 16:00	01/04/22 16:24	20
Xylenes, Total	<0.0795	U	0.0795	mg/Kg		01/03/22 16:00	01/04/22 16:24	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	01/03/22 16:00	01/04/22 16:24	20
1,4-Difluorobenzene (Surr)	90		70 - 130	01/03/22 16:00	01/04/22 16:24	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795	mg/Kg			01/05/22 13:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/05/22 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/04/22 00:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/04/22 00:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/22 10:55	01/04/22 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	01/03/22 10:55	01/04/22 00:32	1
o-Terphenyl	139	S1+	70 - 130	01/03/22 10:55	01/04/22 00:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22400		253	mg/Kg			01/04/22 11:32	50

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## 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)
880-9761-A-1-F MS	Matrix Spike	105	103
880-9761-A-1-G MSD	Matrix Spike Duplicate	115	112
880-9776-A-1-B MS	Matrix Spike	117	112
880-9776-A-1-C MSD	Matrix Spike Duplicate	112	102
890-1782-1	SS01	107	87
890-1782-2	SS02	115	89
890-1782-3	SS03	112	84
890-1782-4	SS04	116	91
890-1782-5	SS05	111	91
890-1782-6	SS06	113	90
LCS 880-15880/1-A	Lab Control Sample	110	104
LCS 880-15881/1-A	Lab Control Sample	113	105
LCSD 880-15880/2-A	Lab Control Sample Dup	104	99
LCSD 880-15881/2-A	Lab Control Sample Dup	114	104
MB 880-15880/5-A	Method Blank	118	104
MB 880-15881/5-A	Method Blank	123	104
<b>Surrogate Legend</b>			
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)
890-1780-A-1-D MS	Matrix Spike	118	113
890-1780-A-1-E MSD	Matrix Spike Duplicate	119	117
890-1782-1	SS01	165 S1+	166 S1+
890-1782-2	SS02	140 S1+	144 S1+
890-1782-3	SS03	146 S1+	152 S1+
890-1782-4	SS04	143 S1+	148 S1+
890-1782-5	SS05	138 S1+	144 S1+
890-1782-6	SS06	137 S1+	139 S1+
LCS 880-15882/2-A	Lab Control Sample	101	84
LCSD 880-15882/3-A	Lab Control Sample Dup	105	87
MB 880-15882/1-A	Method Blank	112	126
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

Lab Sample ID: MB 880-15880/5-A

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15880

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/03/22 10:15	01/03/22 16:07	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/03/22 10:15	01/03/22 16:07	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/03/22 10:15	01/03/22 16:07	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/03/22 10:15	01/03/22 16:07	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/03/22 10:15	01/03/22 16:07	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/03/22 10:15	01/03/22 16:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/03/22 10:15	01/03/22 16:07	1
1,4-Difluorobenzene (Surr)	104		70 - 130	01/03/22 10:15	01/03/22 16:07	1

Lab Sample ID: LCS 880-15880/1-A

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07590		mg/Kg		76	70 - 130
Toluene	0.100	0.08444		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08959		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1803		mg/Kg		90	70 - 130
o-Xylene	0.100	0.08893		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-15880/2-A

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15880

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07867		mg/Kg		79	70 - 130	4	35
Toluene	0.100	0.07724		mg/Kg		77	70 - 130	9	35
Ethylbenzene	0.100	0.08677		mg/Kg		87	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1679		mg/Kg		84	70 - 130	7	35
o-Xylene	0.100	0.08165		mg/Kg		82	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-9761-A-1-F MS

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0990	0.06999		mg/Kg		71	70 - 130
Toluene	<0.00200	U	0.0990	0.07015		mg/Kg		71	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

Lab Sample ID: 880-9761-A-1-F MS

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.0990	0.07018		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00400	U F1	0.198	0.1314	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00200	U	0.0990	0.06933		mg/Kg		70	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-9761-A-1-G MSD

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.07134		mg/Kg		71	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.07064		mg/Kg		71	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.100	0.07258		mg/Kg		73	70 - 130	3	35
m-Xylene & p-Xylene	<0.00400	U F1	0.200	0.1504		mg/Kg		75	70 - 130	13	35
o-Xylene	<0.00200	U	0.100	0.07389		mg/Kg		74	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-15881/5-A

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15881

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/03/22 16:00	01/04/22 12:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	01/03/22 16:00	01/04/22 12:52	1
1,4-Difluorobenzene (Surr)	104		70 - 130	01/03/22 16:00	01/04/22 12:52	1

Lab Sample ID: LCS 880-15881/1-A

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15881

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07225		mg/Kg		72	70 - 130
Toluene	0.100	0.07317		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.08304		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1620		mg/Kg		81	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

Lab Sample ID: LCS 880-15881/1-A

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15881

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.100	0.08231		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-15881/2-A

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15881

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07039		mg/Kg		70	70 - 130	3	35
Toluene	0.100	0.07719		mg/Kg		77	70 - 130	5	35
Ethylbenzene	0.100	0.08395		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1671		mg/Kg		84	70 - 130	3	35
o-Xylene	0.100	0.08181		mg/Kg		82	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-9776-A-1-B MS

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.101	0.06410	F1	mg/Kg		63	70 - 130
Toluene	<0.00201	U F1	0.101	0.07526		mg/Kg		75	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.07811		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1524		mg/Kg		75	70 - 130
o-Xylene	<0.00201	U	0.101	0.07818		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-9776-A-1-C MSD

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.101	0.05875	F1	mg/Kg		58	70 - 130	9	35
Toluene	<0.00201	U F1	0.101	0.06520	F1	mg/Kg		65	70 - 130	14	35
Ethylbenzene	<0.00201	U	0.101	0.07257		mg/Kg		72	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1434		mg/Kg		71	70 - 130	6	35
o-Xylene	<0.00201	U	0.101	0.07200		mg/Kg		72	70 - 130	8	35

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

Lab Sample ID: 880-9776-A-1-C MSD

Matrix: Solid

Analysis Batch: 15940

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15881

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-15882/1-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15882

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 20:25	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 20:25	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 10:55	01/03/22 20:25	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-Chlorooctane	112		70 - 130			01/03/22 10:55	01/03/22 20:25	1	
o-Terphenyl	126		70 - 130			01/03/22 10:55	01/03/22 20:25	1	

Lab Sample ID: LCS 880-15882/2-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15882

	Spike	LCS	LCS					%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	861.5		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1101		mg/Kg		110	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	84		70 - 130						

Lab Sample ID: LCSD 880-15882/3-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15882

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	940.4		mg/Kg		94	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1162		mg/Kg		116	70 - 130	5	20
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	87		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

Lab Sample ID: 890-1780-A-1-D MS

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15882

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	515.1	F1	mg/Kg		50	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	491.8	F1	mg/Kg		49	70 - 130		

Lab Sample ID: 890-1780-A-1-E MSD

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15882

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	522.7	F1	mg/Kg		51	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	512.8	F1	mg/Kg		51	70 - 130	4	20
		</									

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15878/1-A

Matrix: Solid

Analysis Batch: 15923

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/04/22 08:47	1

Lab Sample ID: LCS 880-15878/2-A

Matrix: Solid

Analysis Batch: 15923

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.7		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-15878/3-A

Matrix: Solid

Analysis Batch: 15923

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	246.2		mg/Kg		98	90 - 110	0	20

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1782-4 MS

Matrix: Solid

Analysis Batch: 15923

Client Sample ID: SS04

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24100	F1	12500	34400	F1	mg/Kg		82	90 - 110

Lab Sample ID: 890-1782-4 MSD

Matrix: Solid

Analysis Batch: 15923

Client Sample ID: SS04

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	24100	F1	12500	35910		mg/Kg		94	90 - 110	4	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## GC VOA

## Analysis Batch: 15550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	8021B	15880
890-1782-2	SS02	Total/NA	Solid	8021B	15880
MB 880-15880/5-A	Method Blank	Total/NA	Solid	8021B	15880
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	8021B	15880
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15880
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	15880
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15880

## Prep Batch: 15880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	5035	
890-1782-2	SS02	Total/NA	Solid	5035	
MB 880-15880/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 15881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-3	SS03	Total/NA	Solid	5035	
890-1782-4	SS04	Total/NA	Solid	5035	
890-1782-5	SS05	Total/NA	Solid	5035	
890-1782-6	SS06	Total/NA	Solid	5035	
MB 880-15881/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15881/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15881/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9776-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-9776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 15940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-3	SS03	Total/NA	Solid	8021B	15881
890-1782-4	SS04	Total/NA	Solid	8021B	15881
890-1782-5	SS05	Total/NA	Solid	8021B	15881
890-1782-6	SS06	Total/NA	Solid	8021B	15881
MB 880-15881/5-A	Method Blank	Total/NA	Solid	8021B	15881
LCS 880-15881/1-A	Lab Control Sample	Total/NA	Solid	8021B	15881
LCSD 880-15881/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15881
880-9776-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	15881
880-9776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15881

## Analysis Batch: 16096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	Total BTEX	
890-1782-2	SS02	Total/NA	Solid	Total BTEX	
890-1782-3	SS03	Total/NA	Solid	Total BTEX	
890-1782-4	SS04	Total/NA	Solid	Total BTEX	
890-1782-5	SS05	Total/NA	Solid	Total BTEX	
890-1782-6	SS06	Total/NA	Solid	Total BTEX	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## GC Semi VOA

## Analysis Batch: 15874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	8015B NM	15882
890-1782-2	SS02	Total/NA	Solid	8015B NM	15882
890-1782-3	SS03	Total/NA	Solid	8015B NM	15882
890-1782-4	SS04	Total/NA	Solid	8015B NM	15882
890-1782-5	SS05	Total/NA	Solid	8015B NM	15882
890-1782-6	SS06	Total/NA	Solid	8015B NM	15882
MB 880-15882/1-A	Method Blank	Total/NA	Solid	8015B NM	15882
LCS 880-15882/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15882
LCSD 880-15882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15882
890-1780-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	15882
890-1780-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15882

## Prep Batch: 15882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	8015NM Prep	
890-1782-2	SS02	Total/NA	Solid	8015NM Prep	
890-1782-3	SS03	Total/NA	Solid	8015NM Prep	
890-1782-4	SS04	Total/NA	Solid	8015NM Prep	
890-1782-5	SS05	Total/NA	Solid	8015NM Prep	
890-1782-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-15882/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15882/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1780-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1780-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Total/NA	Solid	8015 NM	
890-1782-2	SS02	Total/NA	Solid	8015 NM	
890-1782-3	SS03	Total/NA	Solid	8015 NM	
890-1782-4	SS04	Total/NA	Solid	8015 NM	
890-1782-5	SS05	Total/NA	Solid	8015 NM	
890-1782-6	SS06	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 15878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Soluble	Solid	DI Leach	
890-1782-2	SS02	Soluble	Solid	DI Leach	
890-1782-3	SS03	Soluble	Solid	DI Leach	
890-1782-4	SS04	Soluble	Solid	DI Leach	
890-1782-5	SS05	Soluble	Solid	DI Leach	
890-1782-6	SS06	Soluble	Solid	DI Leach	
MB 880-15878/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1782-4 MS	SS04	Soluble	Solid	DI Leach	
890-1782-4 MSD	SS04	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

## HPLC/IC

## Analysis Batch: 15923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1782-1	SS01	Soluble	Solid	300.0	15878
890-1782-2	SS02	Soluble	Solid	300.0	15878
890-1782-3	SS03	Soluble	Solid	300.0	15878
890-1782-4	SS04	Soluble	Solid	300.0	15878
890-1782-5	SS05	Soluble	Solid	300.0	15878
890-1782-6	SS06	Soluble	Solid	300.0	15878
MB 880-15878/1-A	Method Blank	Soluble	Solid	300.0	15878
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	300.0	15878
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15878
890-1782-4 MS	SS04	Soluble	Solid	300.0	15878
890-1782-4 MSD	SS04	Soluble	Solid	300.0	15878

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS01

Lab Sample ID: 890-1782-1

Date Collected: 12/29/21 08:58

Matrix: Solid

Date Received: 12/29/21 15:28

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15550	01/04/22 00:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 22:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		20			15923	01/04/22 15:40	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1782-2

Date Collected: 12/29/21 09:00

Matrix: Solid

Date Received: 12/29/21 15:28

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15550	01/04/22 00:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 23:11	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		50			15923	01/04/22 10:45	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1782-3

Date Collected: 12/29/21 09:02

Matrix: Solid

Date Received: 12/29/21 15:28

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	15881	01/03/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15940	01/04/22 15:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 23:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		50			15923	01/04/22 10:52	CH	XEN MID

Client Sample ID: SS04

Lab Sample ID: 890-1782-4

Date Collected: 12/29/21 09:05

Matrix: Solid

Date Received: 12/29/21 15:28

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	15881	01/03/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15940	01/04/22 15:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID

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## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Client Sample ID: SS04

Lab Sample ID: 890-1782-4

Date Collected: 12/29/21 09:05

Matrix: Solid

Date Received: 12/29/21 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 23:52	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		50			15923	01/04/22 11:00	CH	XEN MID

Client Sample ID: SS05

Lab Sample ID: 890-1782-5

Date Collected: 12/29/21 09:08

Matrix: Solid

Date Received: 12/29/21 15:28

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	15881	01/03/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15940	01/04/22 16:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/04/22 00:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		50			15923	01/04/22 11:24	CH	XEN MID

Client Sample ID: SS06

Lab Sample ID: 890-1782-6

Date Collected: 12/29/21 09:10

Matrix: Solid

Date Received: 12/29/21 15:28

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	15881	01/03/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	15940	01/04/22 16:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/04/22 00:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		50			15923	01/04/22 11:32	CH	XEN MID

## Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Laboratory: Eurofins Xenco

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

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

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

## Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 890-1782-1  
SDG: 31403720.000 task 27.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1782-1	SS01	Solid	12/29/21 08:58	12/29/21 15:28	0.25
890-1782-2	SS02	Solid	12/29/21 09:00	12/29/21 15:28	0.25
890-1782-3	SS03	Solid	12/29/21 09:02	12/29/21 15:28	0.25
890-1782-4	SS04	Solid	12/29/21 09:05	12/29/21 15:28	0.25
890-1782-5	SS05	Solid	12/29/21 09:08	12/29/21 15:28	0.25
890-1782-6	SS06	Solid	12/29/21 09:10	12/29/21 15:28	0.25

## Chain of Custody

Work Order No:



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

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Project Manager: Kalei Jennings		Bill to: (if different) Kalei Jennings	
Company Name: WSP USA		Company Name: WSP USA	
Address: 3300 North A Street Building 1, unit 222		Address: 3300 North A Street Building 1, unit 222	
City, State ZIP: Midland, Texas 79705		City, State ZIP: Midland, Texas 79705	
Phone: 817-683-2503		Email: Kalei.jennings@wsp.com	

Project Name: Leamex 8 Battery		Turn Around	
Project Number: 31403720.000 Task 27.02		Routine <input checked="" type="checkbox"/> Rush: <input type="checkbox"/>	
P.O. Number:		Due Date:	
Sampler's Name: Payton Benner			

SAMPLE RECEIPT				Turn Around			
Temperature (°C):	Temp Blank:	Yes	No	Wet Ice:	Yes	No	
Received Intact:	1.7	Yes	No	Thermometer ID	T-NH-207		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	-0.7		
Sample Custody Seals:	Yes	No	N/A	Total Containers:			

ANALYSIS REQUEST				Work Order Notes	
890-1782 Chain of Custody					
Number of Containers					
TPH (EPA 8015)					
BTX (EPA 0-8021)					
Chloride (EPA 300.0)					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Sample Comments
SS01	S	12/29/21	8:58	0.25	Discrete
SS02	S	12/29/21	9:00	0.25	Discrete
SS03	S	12/29/21	9:02	0.25	Discrete
SS04	S	12/29/21	9:05	0.25	Discrete
SS05	S	12/29/21	9:08	0.25	Discrete
SS06	S	12/29/21	9:10	0.25	Discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Payton Benner</i>	<i>N. Jennings</i>	12/29/21 3:26	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018 1

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1782-1

SDG Number: 31403720.000 task 27.02

Login Number: 1782

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco

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: 890-1782-1

SDG Number: 31403720.000 task 27.02

Login Number: 1782

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco

List Creation: 01/03/22 08:30 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	
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 Midland  
1211 W. Florida Ave  
Midland, TX 79701  
Tel: (432)704-5440

Laboratory Job ID: 880-12724-1

Laboratory Sample Delivery Group: 32.81611, -103.621202  
Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:07:26 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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



Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

**Job ID: 880-12724-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12724-1****Receipt**

The samples were received on 3/22/2022 12:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°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: (LCSD 880-22118/3-A). Evidence of matrix interferences is not obvious.

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

**HPLC/IC**

Method 300\_ORGFM\_28D: The matrix spike duplicate (MSD) recoveries for preparation batch 880-22470 and analytical batch 880-22721 were outside control limits. Non-homogeneity is 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.

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS07

Lab Sample ID: 880-12724-1

Date Collected: 03/16/22 11:00

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 17:44	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 17:44	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 17:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/23/22 10:00	03/23/22 17:44	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 17:44	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/23/22 10:00	03/23/22 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	03/23/22 10:00	03/23/22 17:44	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/23/22 10:00	03/23/22 17:44	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/24/22 16:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 17:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 17:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/22/22 14:00	03/22/22 17:52	1
o-Terphenyl	100		70 - 130	03/22/22 14:00	03/22/22 17:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22700	F1	249	mg/Kg			03/31/22 12:02	50

Client Sample ID: SS08

Lab Sample ID: 880-12724-2

Date Collected: 03/16/22 11:02

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/23/22 10:00	03/23/22 18:05	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/23/22 10:00	03/23/22 18:05	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/23/22 10:00	03/23/22 18:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/23/22 10:00	03/23/22 18:05	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/23/22 10:00	03/23/22 18:05	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/23/22 10:00	03/23/22 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130	03/23/22 10:00	03/23/22 18:05	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS08

Lab Sample ID: 880-12724-2

Date Collected: 03/16/22 11:02

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	03/23/22 10:00	03/23/22 18:05	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/24/22 16:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			03/22/22 14:00	03/22/22 18:13	1
o-Terphenyl	102		70 - 130			03/22/22 14:00	03/22/22 18:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17500		251	mg/Kg			03/31/22 12:29	50

Client Sample ID: SS09

Lab Sample ID: 880-12724-3

Date Collected: 03/16/22 11:06

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:25	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:25	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/23/22 10:00	03/23/22 18:25	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:25	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/23/22 10:00	03/23/22 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	03/23/22 10:00	03/23/22 18:25	1
1,4-Difluorobenzene (Surr)	96		70 - 130	03/23/22 10:00	03/23/22 18:25	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/24/22 16:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:25	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS09

Lab Sample ID: 880-12724-3

Date Collected: 03/16/22 11:06

Matrix: Solid

Date Received: 03/22/22 12:24

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	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			03/22/22 14:00	03/22/22 18:33	1
o-Terphenyl	107		70 - 130			03/22/22 14:00	03/22/22 18:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.3		4.95	mg/Kg			03/31/22 12:38	1

Client Sample ID: SS10

Lab Sample ID: 880-12724-4

Date Collected: 03/16/22 11:10

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/23/22 10:00	03/23/22 18:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130			03/23/22 10:00	03/23/22 18:46	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/23/22 10:00	03/23/22 18:46	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/24/22 16:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			03/22/22 14:00	03/22/22 18:54	1
o-Terphenyl	120		70 - 130			03/22/22 14:00	03/22/22 18:54	1

Eurofins Midland



Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS10  
Date Collected: 03/16/22 11:10  
Date Received: 03/22/22 12:24  
Sample Depth: 0.5'

Lab Sample ID: 880-12724-4  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	16100		252	mg/Kg			03/31/22 12:47	50	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

## 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)
880-12724-1	SS07	125	95
880-12724-2	SS08	171 S1+	97
880-12724-3	SS09	125	96
880-12724-4	SS10	121	98
890-2105-A-1-F MS	Matrix Spike	52 S1-	104
890-2105-A-1-G MSD	Matrix Spike Duplicate	98	109
LCS 880-21853/1-A	Lab Control Sample	98	102
LCSD 880-21853/2-A	Lab Control Sample Dup	100	107
MB 880-21853/5-A	Method Blank	120	96
<b>Surrogate Legend</b>			
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)
880-12698-A-1-D MS	Matrix Spike	99	90
880-12698-A-1-E MSD	Matrix Spike Duplicate	99	90
880-12724-1	SS07	97	100
880-12724-2	SS08	100	102
880-12724-3	SS09	103	107
880-12724-4	SS10	115	120
LCS 880-22118/2-A	Lab Control Sample	108	113
LCSD 880-22118/3-A	Lab Control Sample Dup	125	133 S1+
MB 880-22118/1-A	Method Blank	93	98
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

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

Lab Sample ID: MB 880-21853/5-A

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21853

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	03/23/22 07:30	03/23/22 11:09	1
1,4-Difluorobenzene (Surr)	96		70 - 130	03/23/22 07:30	03/23/22 11:09	1

Lab Sample ID: LCS 880-21853/1-A

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1060		mg/Kg		106	70 - 130
Toluene	0.100	0.08963		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09757		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2096		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-21853/2-A

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21853

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1111		mg/Kg		111	70 - 130	5	35
Toluene	0.100	0.08944		mg/Kg		89	70 - 130	0	35
Ethylbenzene	0.100	0.09503		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2047		mg/Kg		102	70 - 130	2	35
o-Xylene	0.100	0.1019		mg/Kg		102	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-2105-A-1-F MS

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 21853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.0996	0.09756		mg/Kg		98	70 - 130
Toluene	<0.00202	U	0.0996	0.08866		mg/Kg		89	70 - 130

Eurofins Midland

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

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

Lab Sample ID: 890-2105-A-1-F MS

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 21853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00202	U	0.0996	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.199	0.2233		mg/Kg		112	70 - 130
o-Xylene	<0.00202	U	0.0996	0.1109		mg/Kg		111	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	52	S1-	70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2105-A-1-G MSD

Matrix: Solid

Analysis Batch: 22182

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 21853

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.1038		mg/Kg		103	70 - 130	6	35
Toluene	<0.00202	U	0.100	0.08314		mg/Kg		83	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.100	0.08960		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1934		mg/Kg		97	70 - 130	14	35
o-Xylene	<0.00202	U	0.100	0.09686		mg/Kg		97	70 - 130	14	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

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

Lab Sample ID: MB 880-22118/1-A

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22118

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 08:37	03/22/22 10:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 08:37	03/22/22 10:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 08:37	03/22/22 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/22/22 08:37	03/22/22 10:58	1
o-Terphenyl	98		70 - 130	03/22/22 08:37	03/22/22 10:58	1

Lab Sample ID: LCS 880-22118/2-A

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	985.6		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1101		mg/Kg		110	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

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

Lab Sample ID: LCS 880-22118/2-A

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22118

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-22118/3-A

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22118

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1058		mg/Kg		106	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	1284		mg/Kg		128	70 - 130	15	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: 880-12698-A-1-D MS

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1149		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1090		mg/Kg		108	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-12698-A-1-E MSD

Matrix: Solid

Analysis Batch: 22112

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	1181		mg/Kg		118	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1098		mg/Kg		108	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	90		70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12724-1 MS

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: SS07

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	22700	F1	12500	35690		mg/Kg		105	90 - 110

Lab Sample ID: 880-12724-1 MSD

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: SS07

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	22700	F1	12500	33770	F1	mg/Kg		89	90 - 110	6	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

## GC VOA

## Prep Batch: 21853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	5035	
880-12724-2	SS08	Total/NA	Solid	5035	
880-12724-3	SS09	Total/NA	Solid	5035	
880-12724-4	SS10	Total/NA	Solid	5035	
MB 880-21853/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21853/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21853/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2105-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-2105-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 22182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	8021B	21853
880-12724-2	SS08	Total/NA	Solid	8021B	21853
880-12724-3	SS09	Total/NA	Solid	8021B	21853
880-12724-4	SS10	Total/NA	Solid	8021B	21853
MB 880-21853/5-A	Method Blank	Total/NA	Solid	8021B	21853
LCS 880-21853/1-A	Lab Control Sample	Total/NA	Solid	8021B	21853
LCSD 880-21853/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21853
890-2105-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	21853
890-2105-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21853

## Analysis Batch: 22299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	Total BTEX	
880-12724-2	SS08	Total/NA	Solid	Total BTEX	
880-12724-3	SS09	Total/NA	Solid	Total BTEX	
880-12724-4	SS10	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	8015B NM	22118
880-12724-2	SS08	Total/NA	Solid	8015B NM	22118
880-12724-3	SS09	Total/NA	Solid	8015B NM	22118
880-12724-4	SS10	Total/NA	Solid	8015B NM	22118
MB 880-22118/1-A	Method Blank	Total/NA	Solid	8015B NM	22118
LCS 880-22118/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22118
LCSD 880-22118/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22118
880-12698-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	22118
880-12698-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22118

## Prep Batch: 22118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	8015NM Prep	
880-12724-2	SS08	Total/NA	Solid	8015NM Prep	
880-12724-3	SS09	Total/NA	Solid	8015NM Prep	
880-12724-4	SS10	Total/NA	Solid	8015NM Prep	
MB 880-22118/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22118/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

## GC Semi VOA (Continued)

## Prep Batch: 22118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22118/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12698-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12698-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Total/NA	Solid	8015 NM	
880-12724-2	SS08	Total/NA	Solid	8015 NM	
880-12724-3	SS09	Total/NA	Solid	8015 NM	
880-12724-4	SS10	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Soluble	Solid	DI Leach	
880-12724-2	SS08	Soluble	Solid	DI Leach	
880-12724-3	SS09	Soluble	Solid	DI Leach	
880-12724-4	SS10	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12724-1 MS	SS07	Soluble	Solid	DI Leach	
880-12724-1 MSD	SS07	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-1	SS07	Soluble	Solid	300.0	22470
880-12724-2	SS08	Soluble	Solid	300.0	22470
880-12724-3	SS09	Soluble	Solid	300.0	22470
880-12724-4	SS10	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12724-1 MS	SS07	Soluble	Solid	300.0	22470
880-12724-1 MSD	SS07	Soluble	Solid	300.0	22470

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS07

Lab Sample ID: 880-12724-1

Date Collected: 03/16/22 11:00

Matrix: Solid

Date Received: 03/22/22 12:24

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	21853	03/23/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22182	03/23/22 17:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22299	03/24/22 16:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22200	03/23/22 12:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22118	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22112	03/22/22 17:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		50			22721	03/31/22 12:02	SC	XEN MID

Client Sample ID: SS08

Lab Sample ID: 880-12724-2

Date Collected: 03/16/22 11:02

Matrix: Solid

Date Received: 03/22/22 12:24

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	21853	03/23/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22182	03/23/22 18:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22299	03/24/22 16:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22200	03/23/22 12:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22118	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22112	03/22/22 18:13	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		50			22721	03/31/22 12:29	SC	XEN MID

Client Sample ID: SS09

Lab Sample ID: 880-12724-3

Date Collected: 03/16/22 11:06

Matrix: Solid

Date Received: 03/22/22 12:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21853	03/23/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22182	03/23/22 18:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22299	03/24/22 16:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22200	03/23/22 12:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22118	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22112	03/22/22 18:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 12:38	SC	XEN MID

Client Sample ID: SS10

Lab Sample ID: 880-12724-4

Date Collected: 03/16/22 11:10

Matrix: Solid

Date Received: 03/22/22 12:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21853	03/23/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22182	03/23/22 18:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22299	03/24/22 16:34	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Client Sample ID: SS10  
Date Collected: 03/16/22 11:10  
Date Received: 03/22/22 12:24

Lab Sample ID: 880-12724-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22200	03/23/22 12:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22118	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22112	03/22/22 18:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		50			22721	03/31/22 12:47	SC	XEN MID

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

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Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

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

## Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

## Laboratory References:

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



## Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12724-1  
SDG: 32.81611, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12724-1	SS07	Solid	03/16/22 11:00	03/22/22 12:24	0.5'
880-12724-2	SS08	Solid	03/16/22 11:02	03/22/22 12:24	0.5'
880-12724-3	SS09	Solid	03/16/22 11:06	03/22/22 12:24	0.5'
880-12724-4	SS10	Solid	03/16/22 11:10	03/22/22 12:24	0.5'



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334  
Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296  
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900  
Tampa FL (813) 620-2000 Tallahassee FL (904) 756-0747 Delray Beach FL (561) 689-6701  
Atlanta GA (770) 449-8800

Work Order No: 10724

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

Program	UST/PS/PRP	Brownfields	RRC	Superfund
State of Project				
Reporting Level	Level 1	PS/UST	TRRP	Level 1
Deliverables	EDD	ADAPT		Other

Project Name	LEAMEX & BATTERY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number	31403720.000		
Project Location	32.9141, -102.621202		
Sample Name	Hadler Green	Due Date	SPV
PO #			
SAMPLE RECEIPT	Temp Blank	Yes No	Yes No
Temperature (°C)	24.23	Thermometer ID	IRP
Received Intact	Yes No	Correction Factor	-1
Cooler Custody Seals	Yes No	Total Containers	
Sample Custody Seals	Yes No		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
SS07	SL	3-16-22	11:00	0.5'	1	BTEX (EPA 0=8021)	HNO3 HN
SS08	SL	3-16-22	11:02			TPH (EPA 8015)	H2SO4 H2
SS09	SL	3-16-22	11:06			CHLORIDES (EPA 300)	HCL HL
SS10	SL	3-16-22	11:10				None NO
SS11	SL	3-16-22	11:10				NaOH Na
SS12	SL	3-16-22	11:10				MeOH Me
SS13	SL	3-16-22	11:10				Zn Acetate+ NaOH Zn



880-12724 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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			
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)
Xenon	Xenon	3/22/22		
		12:24		

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12724-1  
SDG Number: 32.81611, -103.621202

Login Number: 12724

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing  
America

## ANALYTICAL REPORT

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

Laboratory Job ID: 880-12725-1  
Client Project/Site: Leamex 8 Battery

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:07:26 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12725-1

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
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
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

**Job ID: 880-12725-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12725-1****Receipt**

The samples were received on 3/22/2022 12:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°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**

Method 300\_ORGFM\_28D: The matrix spike duplicate (MSD) recoveries for preparation batch 880-22470 and analytical batch 880-22721 were outside control limits. Non-homogeneity is 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.



## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04

Lab Sample ID: 880-12725-1

Date Collected: 03/17/22 09:17

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 22:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 22:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 22:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 22:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 22:49	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 12:30	03/26/22 22:49	1
1,4-Difluorobenzene (Surr)	110		70 - 130	03/25/22 12:30	03/26/22 22:49	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:18	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		03/22/22 14:00	03/22/22 18:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/22/22 14:00	03/22/22 18:13	1
o-Terphenyl	100		70 - 130	03/22/22 14:00	03/22/22 18:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9160		99.0	mg/Kg			03/31/22 12:56	20

Client Sample ID: PH04A

Lab Sample ID: 880-12725-2

Date Collected: 03/17/22 13:23

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/25/22 12:30	03/26/22 23:10	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/25/22 12:30	03/26/22 23:10	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/25/22 12:30	03/26/22 23:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/25/22 12:30	03/26/22 23:10	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/25/22 12:30	03/26/22 23:10	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/25/22 12:30	03/26/22 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	03/25/22 12:30	03/26/22 23:10	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04A

Lab Sample ID: 880-12725-2

Date Collected: 03/17/22 13:23

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 3'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	03/25/22 12:30	03/26/22 23:10	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:18	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		03/22/22 14:00	03/22/22 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			03/22/22 14:00	03/22/22 18:33	1
o-Terphenyl	102		70 - 130			03/22/22 14:00	03/22/22 18:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		24.9	mg/Kg			03/31/22 13:23	5

Client Sample ID: PH04B

Lab Sample ID: 880-12725-3

Date Collected: 03/17/22 14:15

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 23:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:30	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 23:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 23:30	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 12:30	03/26/22 23:30	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/23/22 12:18	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04B

Lab Sample ID: 880-12725-3

Date Collected: 03/17/22 14:15

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 14:00	03/22/22 18:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			03/22/22 14:00	03/22/22 18:54	1
o-Terphenyl	100		70 - 130			03/22/22 14:00	03/22/22 18:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	329		4.99	mg/Kg			03/31/22 13:31	1

Client Sample ID: PH04C

Lab Sample ID: 880-12725-4

Date Collected: 03/21/22 08:34

Matrix: Solid

Date Received: 03/22/22 12:24

Sample Depth: 6'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 12:30	03/26/22 23:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			03/25/22 12:30	03/26/22 23:51	1
1,4-Difluorobenzene (Surr)	108		70 - 130			03/25/22 12:30	03/26/22 23:51	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/23/22 12:18	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		03/22/22 14:00	03/22/22 19:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/22/22 14:00	03/22/22 19:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/22/22 14:00	03/22/22 19:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			03/22/22 14:00	03/22/22 19:15	1
o-Terphenyl	98		70 - 130			03/22/22 14:00	03/22/22 19:15	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04C  
Date Collected: 03/21/22 08:34  
Date Received: 03/22/22 12:24  
Sample Depth: 6'

Lab Sample ID: 880-12725-4  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	124		4.97	mg/Kg			03/31/22 13:40	1	

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

## 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)
880-12547-A-1-U MS	Matrix Spike	103	110
880-12547-A-1-V MSD	Matrix Spike Duplicate	107	112
880-12725-1	PH04	108	110
880-12725-2	PH04A	106	109
880-12725-3	PH04B	103	108
880-12725-4	PH04C	107	108
LCS 880-22286/1-A	Lab Control Sample	108	112
LCSD 880-22286/2-A	Lab Control Sample Dup	111	111
MB 880-22286/5-A	Method Blank	101	103
<b>Surrogate Legend</b>			
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)
880-12699-A-1-D MS	Matrix Spike	108	88
880-12699-A-1-E MSD	Matrix Spike Duplicate	93	76
880-12725-1	PH04	98	100
880-12725-2	PH04A	102	102
880-12725-3	PH04B	99	100
880-12725-4	PH04C	101	98
LCS 880-22119/2-A	Lab Control Sample	121	114
LCSD 880-22119/3-A	Lab Control Sample Dup	120	111
MB 880-22119/1-A	Method Blank	107	112
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

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

Lab Sample ID: MB 880-22286/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22286

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/22 12:30	03/26/22 20:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 20:25	1

Lab Sample ID: LCS 880-22286/1-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1052		mg/Kg		105	70 - 130
Toluene	0.100	0.1048		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1083		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2283		mg/Kg		114	70 - 130
o-Xylene	0.100	0.1097		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22286/2-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22286

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1058		mg/Kg		106	70 - 130	0	35
Toluene	0.100	0.1063		mg/Kg		106	70 - 130	1	35
Ethylbenzene	0.100	0.1099		mg/Kg		110	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2326		mg/Kg		116	70 - 130	2	35
o-Xylene	0.100	0.1125		mg/Kg		113	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-12547-A-1-U MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U	0.0996	0.08375		mg/Kg		84	70 - 130
Toluene	0.00232		0.0996	0.08300		mg/Kg		81	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

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

Lab Sample ID: 880-12547-A-1-U MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00201	U	0.0996	0.08902		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.00613		0.199	0.1826		mg/Kg		89	70 - 130
o-Xylene	0.00221		0.0996	0.09140		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-12547-A-1-V MSD

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22286

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00201	U	0.100	0.08729		mg/Kg		87	70 - 130	4	35
Toluene	0.00232		0.100	0.08596		mg/Kg		83	70 - 130	4	35
Ethylbenzene	<0.00201	U	0.100	0.09215		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene	0.00613		0.200	0.1891		mg/Kg		91	70 - 130	4	35
o-Xylene	0.00221		0.100	0.09486		mg/Kg		92	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

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

Lab Sample ID: MB 880-22119/1-A

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22119

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/22/22 08:40	03/22/22 10:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/22/22 08:40	03/22/22 10:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/22/22 08:40	03/22/22 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/22/22 08:40	03/22/22 10:58	1
o-Terphenyl	112		70 - 130	03/22/22 08:40	03/22/22 10:58	1

Lab Sample ID: LCS 880-22119/2-A

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22119

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	949.0		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1206		mg/Kg		121	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

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

Lab Sample ID: LCS 880-22119/2-A

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22119

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-22119/3-A

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22119

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	871.9		mg/Kg		87	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1154		mg/Kg		115	70 - 130	4	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 880-12699-A-1-D MS

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22119

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1048		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1016		mg/Kg		98	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-12699-A-1-E MSD

Matrix: Solid

Analysis Batch: 22114

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22119

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	897.5		mg/Kg		90	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	877.6		mg/Kg		84	70 - 130	15	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	76		70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12724-A-1-E MS

Matrix: Solid

Analysis Batch: 22721

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	22700	F1	12500	35690		mg/Kg		105	90 - 110

Lab Sample ID: 880-12724-A-1-F MSD

Matrix: Solid

Analysis Batch: 22721

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	22700	F1	12500	33770	F1	mg/Kg		89	90 - 110	6	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

## GC VOA

## Prep Batch: 22286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	5035	
880-12725-2	PH04A	Total/NA	Solid	5035	
880-12725-3	PH04B	Total/NA	Solid	5035	
880-12725-4	PH04C	Total/NA	Solid	5035	
MB 880-22286/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22286/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22286/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12547-A-1-U MS	Matrix Spike	Total/NA	Solid	5035	
880-12547-A-1-V MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	8021B	22286
880-12725-2	PH04A	Total/NA	Solid	8021B	22286
880-12725-3	PH04B	Total/NA	Solid	8021B	22286
880-12725-4	PH04C	Total/NA	Solid	8021B	22286
MB 880-22286/5-A	Method Blank	Total/NA	Solid	8021B	22286
LCS 880-22286/1-A	Lab Control Sample	Total/NA	Solid	8021B	22286
LCSD 880-22286/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22286
880-12547-A-1-U MS	Matrix Spike	Total/NA	Solid	8021B	22286
880-12547-A-1-V MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22286

## Analysis Batch: 22491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	Total BTEX	
880-12725-2	PH04A	Total/NA	Solid	Total BTEX	
880-12725-3	PH04B	Total/NA	Solid	Total BTEX	
880-12725-4	PH04C	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	8015B NM	22119
880-12725-2	PH04A	Total/NA	Solid	8015B NM	22119
880-12725-3	PH04B	Total/NA	Solid	8015B NM	22119
880-12725-4	PH04C	Total/NA	Solid	8015B NM	22119
MB 880-22119/1-A	Method Blank	Total/NA	Solid	8015B NM	22119
LCS 880-22119/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22119
LCSD 880-22119/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22119
880-12699-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	22119
880-12699-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22119

## Prep Batch: 22119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	8015NM Prep	
880-12725-2	PH04A	Total/NA	Solid	8015NM Prep	
880-12725-3	PH04B	Total/NA	Solid	8015NM Prep	
880-12725-4	PH04C	Total/NA	Solid	8015NM Prep	
MB 880-22119/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22119/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

## GC Semi VOA (Continued)

## Prep Batch: 22119 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22119/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12699-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12699-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Total/NA	Solid	8015 NM	
880-12725-2	PH04A	Total/NA	Solid	8015 NM	
880-12725-3	PH04B	Total/NA	Solid	8015 NM	
880-12725-4	PH04C	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Soluble	Solid	DI Leach	
880-12725-2	PH04A	Soluble	Solid	DI Leach	
880-12725-3	PH04B	Soluble	Solid	DI Leach	
880-12725-4	PH04C	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12724-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12724-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12725-1	PH04	Soluble	Solid	300.0	22470
880-12725-2	PH04A	Soluble	Solid	300.0	22470
880-12725-3	PH04B	Soluble	Solid	300.0	22470
880-12725-4	PH04C	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12724-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	22470
880-12724-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22470

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## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04

Lab Sample ID: 880-12725-1

Date Collected: 03/17/22 09:17

Matrix: Solid

Date Received: 03/22/22 12:24

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	22286	03/25/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/26/22 22:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22491	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22198	03/23/22 12:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22119	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22114	03/22/22 18:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		20			22721	03/31/22 12:56	SC	XEN MID

Client Sample ID: PH04A

Lab Sample ID: 880-12725-2

Date Collected: 03/17/22 13:23

Matrix: Solid

Date Received: 03/22/22 12:24

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	22286	03/25/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/26/22 23:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22491	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22198	03/23/22 12:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22119	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22114	03/22/22 18:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		5			22721	03/31/22 13:23	SC	XEN MID

Client Sample ID: PH04B

Lab Sample ID: 880-12725-3

Date Collected: 03/17/22 14:15

Matrix: Solid

Date Received: 03/22/22 12:24

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	22286	03/25/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/26/22 23:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22491	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22198	03/23/22 12:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22119	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22114	03/22/22 18:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 13:31	SC	XEN MID

Client Sample ID: PH04C

Lab Sample ID: 880-12725-4

Date Collected: 03/21/22 08:34

Matrix: Solid

Date Received: 03/22/22 12:24

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	22286	03/25/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/26/22 23:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22491	03/28/22 13:11	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Client Sample ID: PH04C

Date Collected: 03/21/22 08:34

Date Received: 03/22/22 12:24

Lab Sample ID: 880-12725-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22198	03/23/22 12:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22119	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22114	03/22/22 19:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 13:40	SC	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Laboratory: Eurofins Midland

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

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

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

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



## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

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

## Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

## Laboratory References:

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

Eurofins Midland

## Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12725-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12725-1	PH04	Solid	03/17/22 09:17	03/22/22 12:24	1'
880-12725-2	PH04A	Solid	03/17/22 13:23	03/22/22 12:24	3'
880-12725-3	PH04B	Solid	03/17/22 14:15	03/22/22 12:24	5'
880-12725-4	PH04C	Solid	03/21/22 08:34	03/22/22 12:24	6'



## Chain of Custody

Work Order No: 12725

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

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Project Manager	Kalei Jennings	Bill to (if different)	Kalei Jennings
Company Name	WSP USA INC.	Company Name	
Address	3300 North A Street, Bldg 1, Unit 222	Address	
City State ZIP	Midland TX 79705	City State ZIP	
Phone	817-683-2603	Email	Kalei.Jennings@wsp.com

Program <input type="checkbox"/> UST/PSST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project:	
Reporting Level <input type="checkbox"/> Level 1 <input type="checkbox"/> PST/UST <input type="checkbox"/> TRR <input type="checkbox"/> Level 1 <input type="checkbox"/>	Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	LEAMEX 8 BATTERY	Turn Around	<input checked="" type="checkbox"/>
Project Number	31453710.000	Rush	<input type="checkbox"/>
Project Location	Hoodie Green	Due Date	5/24/21
PO #:			
SAMPLE RECEIPT	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice
Temperature (°C)	2.4/2.3	Thermometer ID	IPB
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	-1
Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Total Containers	
Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Sample Identification	Matrix	Date		Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST												Preservative Codes	Sample Comments
		Sampled	Time Sampled			HN03 HN	H2SO4 H2	HCL HL	None NO	NaOH Na	MeOH Me	Zn Acetate+ NaOH Zn	TAT starts the day received by the lab if received by 4:30pm						
PH04	SL	3-17-22	09:17	1'	1	X	X	X											
PH04A			13:23	3'															
PH04B			14:15	5'															
PH04C			3-21-22 08:34	6'															

880-12725 Chain of Custody

Barcode: 880-12725

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

Relinquished by (Signature): *Platin Green* Received by (Signature): *Kalei Jennings* Date/Time: 3/22/22 12:24

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12725-1

Login Number: 12725

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

Laboratory Job ID: 880-12798-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:07:56 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

## 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.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

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



## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12798-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12798-1****Receipt**

The sample was received on 3/23/2022 2:11 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°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: The laboratory control sample (LCS) associated with preparation batch 880-22247 and analytical batch 880-22239 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

**HPLC/IC**

Method 300\_ORGFM\_28D: The matrix spike duplicate (MSD) recoveries for preparation batch 880-22470 and analytical batch 880-22721 were outside control limits. Non-homogeneity is 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.

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01C

Lab Sample ID: 880-12798-1

Date Collected: 03/22/22 09:05

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 9

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/24/22 07:30	03/24/22 11:44	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/24/22 07:30	03/24/22 11:44	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/24/22 07:30	03/24/22 11:44	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/24/22 07:30	03/24/22 11:44	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/24/22 07:30	03/24/22 11:44	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/24/22 07:30	03/24/22 11:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/24/22 07:30	03/24/22 11:44	1
1,4-Difluorobenzene (Surr)	112		70 - 130	03/24/22 07:30	03/24/22 11:44	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/24/22 16:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 17:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 17:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/24/22 08:53	03/24/22 17:48	1
o-Terphenyl	106		70 - 130	03/24/22 08:53	03/24/22 17:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	593		4.95	mg/Kg			03/31/22 13:49	1

Eurofins Midland

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

## 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)
880-12798-1	PH01C	104	112
880-12798-1 MS	PH01C	125	105
880-12798-1 MSD	PH01C	103	109
LCS 880-22227/1-A	Lab Control Sample	101	111
LCSD 880-22227/2-A	Lab Control Sample Dup	105	113
MB 880-22227/5-A	Method Blank	102	103
<b>Surrogate Legend</b>			
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)
880-12798-1	PH01C	106	106
880-12803-A-1-C MS	Matrix Spike	118	98
880-12803-A-1-D MSD	Matrix Spike Duplicate	104	85
LCS 880-22247/2-A	Lab Control Sample	111	105
LCSD 880-22247/3-A	Lab Control Sample Dup	95	88
MB 880-22247/1-A	Method Blank	119	124
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22227/5-A

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22227

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 11:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 11:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/22 07:30	03/24/22 11:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 11:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/22 07:30	03/24/22 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/22 07:30	03/24/22 11:23	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/24/22 07:30	03/24/22 11:23	1

Lab Sample ID: LCS 880-22227/1-A

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09157		mg/Kg		92	70 - 130
Toluene	0.100	0.09172		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09572		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09719		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-22227/2-A

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08966		mg/Kg		90	70 - 130	2	35
Toluene	0.100	0.08916		mg/Kg		89	70 - 130	3	35
Ethylbenzene	0.100	0.09231		mg/Kg		92	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1911		mg/Kg		96	70 - 130	3	35
o-Xylene	0.100	0.09426		mg/Kg		94	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-12798-1 MS

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: PH01C

Prep Type: Total/NA

Prep Batch: 22227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U	0.0998	0.1087		mg/Kg		109	70 - 130
Toluene	<0.00198	U	0.0998	0.09832		mg/Kg		98	70 - 130

Eurofins Midland

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12798-1 MS

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: PH01C

Prep Type: Total/NA

Prep Batch: 22227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U	0.0998	0.1010		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.2547		mg/Kg		127	70 - 130
o-Xylene	<0.00198	U	0.0998	0.1181		mg/Kg		118	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-12798-1 MSD

Matrix: Solid

Analysis Batch: 22236

Client Sample ID: PH01C

Prep Type: Total/NA

Prep Batch: 22227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0990	0.08779		mg/Kg		89	70 - 130	21	35
Toluene	<0.00198	U	0.0990	0.08896		mg/Kg		89	70 - 130	10	35
Ethylbenzene	<0.00198	U	0.0990	0.09661		mg/Kg		97	70 - 130	4	35
m-Xylene & p-Xylene	<0.00396	U	0.198	0.1949		mg/Kg		98	70 - 130	27	35
o-Xylene	<0.00198	U	0.0990	0.1062		mg/Kg		107	70 - 130	11	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	03/24/22 08:53	03/24/22 11:17	1
o-Terphenyl	124		70 - 130	03/24/22 08:53	03/24/22 11:17	1

Lab Sample ID: LCS 880-22247/2-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	769.8		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1087		mg/Kg		109	70 - 130

Eurofins Midland

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: LCS 880-22247/2-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22247

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-22247/3-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22247

	Spike	LCSD	LCSD						%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	1000	671.6	*-	mg/Kg		67	70 - 130	14	20		
Diesel Range Organics (Over C10-C28)	1000	918.7		mg/Kg		92	70 - 130	17	20		

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-12803-A-1-C MS

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22247

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	998	1227		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1212		mg/Kg		119	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 880-12803-A-1-D MSD

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22247

	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	1018		mg/Kg		99	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1064		mg/Kg		104	70 - 130	13	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	85		70 - 130

Eurofins Midland

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12724-A-1-E MS

Matrix: Solid

Analysis Batch: 22721

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	22700	F1	12500	35690		mg/Kg		105	90 - 110

Lab Sample ID: 880-12724-A-1-F MSD

Matrix: Solid

Analysis Batch: 22721

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	22700	F1	12500	33770	F1	mg/Kg		89	90 - 110	6	20



## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 22227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	5035	
MB 880-22227/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22227/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22227/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12798-1 MS	PH01C	Total/NA	Solid	5035	
880-12798-1 MSD	PH01C	Total/NA	Solid	5035	

## Analysis Batch: 22236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	8021B	22227
MB 880-22227/5-A	Method Blank	Total/NA	Solid	8021B	22227
LCS 880-22227/1-A	Lab Control Sample	Total/NA	Solid	8021B	22227
LCSD 880-22227/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22227
880-12798-1 MS	PH01C	Total/NA	Solid	8021B	22227
880-12798-1 MSD	PH01C	Total/NA	Solid	8021B	22227

## Analysis Batch: 22301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	8015B NM	22247
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015B NM	22247
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22247
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22247
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	22247
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22247

## Prep Batch: 22247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	8015NM Prep	
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

## HPLC/IC (Continued)

## Leach Batch: 22470 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12724-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12724-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12798-1	PH01C	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12724-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	22470
880-12724-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22470

Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01C  
Date Collected: 03/22/22 09:05  
Date Received: 03/23/22 14:11

Lab Sample ID: 880-12798-1  
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			5.05 g	5 mL	22227	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22236	03/24/22 11:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22301	03/24/22 16:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22320	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 17:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 13:49	SC	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Midland

Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12798-1  
SDG: 32.816111, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12798-1	PH01C	Solid	03/22/22 09:05	03/23/22 14:11	9

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Chain of Custody

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

Work Order No: 12798

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

Work Order Comments	
Program UST/PS/PRP/Brownfields/RRR/Superfund	
State of Project	
Reporting Level Level I/II/III/IV/Level V	
Deliverables EDD ADAPT Other	

Project Name	LEAMEX 9 BATTERY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number	3403720.000	27.02	
Project Location	32.816111, -103.621202		
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #			
SAMPLE RECEIPT			
Temperature (°C)	44/43	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Received In tact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	1128
Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor	-0.1
Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Total Containers	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
PH01C	SL	3-22-22	0905	9	1	BTEX (EPA 0=8021)	HN03 HN
						TPH (EPA 8015)	H2SO4 H2
						CHLORIDES (EPA 300)	HCL HL
							None NO
							NaOH Na
							MeOH Me
							Zn Acetate+ NaOH Zn



880-12798 Chain of Custody

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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
Hadlie Green	Kalei Jennings	3/23/22			
		14 11			



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12798-1

SDG Number: 32.816111, -103.621202

Login Number: 12798

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 880-12799-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:08:17 PM

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

#### LINKS

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

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12799-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12799-1****Receipt**

The samples were received on 3/23/2022 2:11 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22243 and analytical batch 880-22424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-22418 and analytical batch 880-22425 recovered outside control limits for the following analytes: m-Xylene & p-Xylene and o-Xylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-22418 and analytical batch 880-22425 recovered outside control limits for the following analytes: m-Xylene & p-Xylene, o-Xylene, Xylenes, Total and Toluene

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22418 and analytical batch 880-22425 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-22247 and analytical batch 880-22239 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

**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: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01

Lab Sample ID: 880-12799-1

Date Collected: 03/17/22 09:03

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 14:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 14:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 14:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 14:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 14:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 14:27	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/25/22 14:00	03/27/22 14:27	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 18:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 18:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	03/24/22 08:53	03/24/22 18:09	1
o-Terphenyl	111		70 - 130	03/24/22 08:53	03/24/22 18:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6440		50.0	mg/Kg			03/31/22 13:58	10

Client Sample ID: PH01A

Lab Sample ID: 880-12799-2

Date Collected: 03/21/22 10:56

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 20:40	1
Toluene	<0.00200	U *1	0.00200	mg/Kg		03/28/22 09:00	03/28/22 20:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 20:40	1
m-Xylene & p-Xylene	<0.00401	U *+ *1	0.00401	mg/Kg		03/28/22 09:00	03/28/22 20:40	1
o-Xylene	<0.00200	U *+ *1	0.00200	mg/Kg		03/28/22 09:00	03/28/22 20:40	1
Xylenes, Total	<0.00401	U *+ *1	0.00401	mg/Kg		03/28/22 09:00	03/28/22 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	03/28/22 09:00	03/28/22 20:40	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01A

Lab Sample ID: 880-12799-2

Date Collected: 03/21/22 10:56

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	03/28/22 09:00	03/28/22 20:40	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 18:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 18:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			03/24/22 08:53	03/24/22 18:29	1
o-Terphenyl	108		70 - 130			03/24/22 08:53	03/24/22 18:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5140		49.9	mg/Kg			03/31/22 14:06	10

Client Sample ID: PH01B

Lab Sample ID: 880-12799-3

Date Collected: 03/21/22 11:51

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 15:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/25/22 14:00	03/27/22 15:08	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 15:08	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 19:53	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01B

Lab Sample ID: 880-12799-3

Date Collected: 03/21/22 11:51

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *-	49.9	mg/Kg		03/24/22 08:53	03/24/22 18:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/22 08:53	03/24/22 18:50	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:53	03/24/22 18:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			03/24/22 08:53	03/24/22 18:50	1
o-Terphenyl	127		70 - 130			03/24/22 08:53	03/24/22 18:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2480		24.8	mg/Kg			03/31/22 14:32	5

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

## 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)
880-12799-1	PH01	102	104
880-12799-2	PH01A	111	99
880-12799-3	PH01B	105	108
880-12893-A-21-D MS	Matrix Spike	116	96
880-12893-A-21-E MSD	Matrix Spike Duplicate	108	94
890-2130-A-1-C MS	Matrix Spike	103	96
890-2130-A-1-D MSD	Matrix Spike Duplicate	103	102
LCS 880-22243/1-A	Lab Control Sample	103	112
LCS 880-22418/1-A	Lab Control Sample	105	103
LCSD 880-22243/2-A	Lab Control Sample Dup	103	113
LCSD 880-22418/2-A	Lab Control Sample Dup	88	110
MB 880-22243/5-A	Method Blank	100	102
MB 880-22286/5-A	Method Blank	101	103
MB 880-22418/5-A	Method Blank	98	101
<b>Surrogate Legend</b>			
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)
880-12799-1	PH01	110	111
880-12799-2	PH01A	107	108
880-12799-3	PH01B	127	127
880-12803-A-1-C MS	Matrix Spike	118	98
880-12803-A-1-D MSD	Matrix Spike Duplicate	104	85
LCS 880-22247/2-A	Lab Control Sample	111	105
LCSD 880-22247/3-A	Lab Control Sample Dup	95	88
MB 880-22247/1-A	Method Blank	119	124
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22243/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22243

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 14:00	03/27/22 13:44	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 13:44	1

Lab Sample ID: LCS 880-22243/1-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1116		mg/Kg		112	70 - 130
Toluene	0.100	0.1083		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1073		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22243/2-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1245		mg/Kg		124	70 - 130	11	35
Toluene	0.100	0.1183		mg/Kg		118	70 - 130	9	35
Ethylbenzene	0.100	0.1133		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130	5	35
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.0990	0.01306	F1	mg/Kg		13	70 - 130
Toluene	<0.00198	U F1	0.0990	0.01961	F1	mg/Kg		20	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U F1	0.0990	0.02046	F1	mg/Kg		21	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.198	0.04644	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00198	U F1	0.0990	0.02723	F1	mg/Kg		27	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2130-A-1-D MSD

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.01827	F1	mg/Kg		18	70 - 130	33	35
Toluene	<0.00198	U F1	0.100	0.01840	F1	mg/Kg		18	70 - 130	6	35
Ethylbenzene	<0.00198	U F1	0.100	0.02171	F1	mg/Kg		22	70 - 130	6	35
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.04688	F1	mg/Kg		23	70 - 130	1	35
o-Xylene	<0.00198	U F1	0.100	0.02815	F1	mg/Kg		28	70 - 130	3	35

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

Lab Sample ID: MB 880-22286/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22286

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/22 12:30	03/26/22 20:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 20:25	1

Lab Sample ID: MB 880-22418/5-A

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22418

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 18:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/28/22 09:00	03/28/22 18:08	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22418/5-A

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22418

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			03/28/22 09:00	03/28/22 18:08	1
1,4-Difluorobenzene (Surr)	101		70 - 130			03/28/22 09:00	03/28/22 18:08	1

Lab Sample ID: LCS 880-22418/1-A

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1075		mg/Kg		108	70 - 130
Toluene	0.100	0.1121		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1147		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2787	*+	mg/Kg		139	70 - 130
o-Xylene	0.100	0.1331	*+	mg/Kg		133	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	105		70 - 130				
1,4-Difluorobenzene (Surr)	103		70 - 130				

Lab Sample ID: LCSD 880-22418/2-A

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22418

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08101		mg/Kg		81	70 - 130	28	35
Toluene	0.100	0.07156	*1	mg/Kg		72	70 - 130	44	35
Ethylbenzene	0.100	0.08312		mg/Kg		83	70 - 130	32	35
m-Xylene & p-Xylene	0.200	0.1778	*1	mg/Kg		89	70 - 130	44	35
o-Xylene	0.100	0.08601	*1	mg/Kg		86	70 - 130	43	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	88		70 - 130						
1,4-Difluorobenzene (Surr)	110		70 - 130						

Lab Sample ID: 880-12893-A-21-D MS

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22418

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U F1	0.100	0.005133	F1	mg/Kg		5	70 - 130
Toluene	<0.00202	U F1 *1	0.100	0.007147	F1	mg/Kg		6	70 - 130
Ethylbenzene	<0.00202	U F1	0.100	0.007349	F1	mg/Kg		7	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1 *+ *1	0.200	0.02063	F1	mg/Kg		10	70 - 130
o-Xylene	<0.00202	U F1 *+ *1	0.100	0.01202	F1	mg/Kg		12	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12893-A-21-D MS

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22418

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-12893-A-21-E MSD

Matrix: Solid

Analysis Batch: 22425

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22418

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.0998	0.005869	F1	mg/Kg		6	70 - 130	13	35
Toluene	<0.00202	U F1 *1	0.0998	0.007392	F1	mg/Kg		7	70 - 130	3	35
Ethylbenzene	<0.00202	U F1	0.0998	0.008363	F1	mg/Kg		8	70 - 130	13	35
m-Xylene & p-Xylene	<0.00403	U F1 *+ *1	0.200	0.01614	F1	mg/Kg		8	70 - 130	24	35
o-Xylene	<0.00202	U F1 *+ *1	0.0998	0.01161	F1	mg/Kg		12	70 - 130	4	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	119		70 - 130	03/24/22 08:53	03/24/22 11:17	1		
o-Terphenyl	124		70 - 130	03/24/22 08:53	03/24/22 11:17	1		

Lab Sample ID: LCS 880-22247/2-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	769.8		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1087		mg/Kg		109	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	105		70 - 130

Eurofins Midland

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: LCSD 880-22247/3-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	671.6	*-	mg/Kg		67	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	918.7		mg/Kg		92	70 - 130	17	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: 880-12803-A-1-C MS

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	998	1227		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1212		mg/Kg		119	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	98		70 - 130								

Lab Sample ID: 880-12803-A-1-D MSD

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	999	1018		mg/Kg		99	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1064		mg/Kg		104	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	85		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Eurofins Midland



## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12799-2 MS

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: PH01A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5140		2500	7478		mg/Kg		94	90 - 110		

Lab Sample ID: 880-12799-2 MSD

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: PH01A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5140		2500	7546		mg/Kg		97	90 - 110	1	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 22243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	5035	
880-12799-3	PH01B	Total/NA	Solid	5035	
MB 880-22243/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 22286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22286/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 22418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-2	PH01A	Total/NA	Solid	5035	
MB 880-22418/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22418/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22418/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12893-A-21-D MS	Matrix Spike	Total/NA	Solid	5035	
880-12893-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	8021B	22243
880-12799-3	PH01B	Total/NA	Solid	8021B	22243
MB 880-22243/5-A	Method Blank	Total/NA	Solid	8021B	22243
MB 880-22286/5-A	Method Blank	Total/NA	Solid	8021B	22286
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	8021B	22243
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22243
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	22243
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22243

## Analysis Batch: 22425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-2	PH01A	Total/NA	Solid	8021B	22418
MB 880-22418/5-A	Method Blank	Total/NA	Solid	8021B	22418
LCS 880-22418/1-A	Lab Control Sample	Total/NA	Solid	8021B	22418
LCSD 880-22418/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22418
880-12893-A-21-D MS	Matrix Spike	Total/NA	Solid	8021B	22418
880-12893-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22418

## Analysis Batch: 22500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	Total BTEX	
880-12799-2	PH01A	Total/NA	Solid	Total BTEX	
880-12799-3	PH01B	Total/NA	Solid	Total BTEX	

Eurofins Midland

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

## GC Semi VOA

## Analysis Batch: 22239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	8015B NM	22247
880-12799-2	PH01A	Total/NA	Solid	8015B NM	22247
880-12799-3	PH01B	Total/NA	Solid	8015B NM	22247
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015B NM	22247
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22247
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22247
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	22247
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22247

## Prep Batch: 22247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	8015NM Prep	
880-12799-2	PH01A	Total/NA	Solid	8015NM Prep	
880-12799-3	PH01B	Total/NA	Solid	8015NM Prep	
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Total/NA	Solid	8015 NM	
880-12799-2	PH01A	Total/NA	Solid	8015 NM	
880-12799-3	PH01B	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Soluble	Solid	DI Leach	
880-12799-2	PH01A	Soluble	Solid	DI Leach	
880-12799-3	PH01B	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12799-2 MS	PH01A	Soluble	Solid	DI Leach	
880-12799-2 MSD	PH01A	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12799-1	PH01	Soluble	Solid	300.0	22470
880-12799-2	PH01A	Soluble	Solid	300.0	22470
880-12799-3	PH01B	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12799-2 MS	PH01A	Soluble	Solid	300.0	22470
880-12799-2 MSD	PH01A	Soluble	Solid	300.0	22470

Eurofins Midland

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH01

Lab Sample ID: 880-12799-1

Date Collected: 03/17/22 09:03

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 14:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22500	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22321	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 18:09	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		10			22721	03/31/22 13:58	SC	XEN MID

Client Sample ID: PH01A

Lab Sample ID: 880-12799-2

Date Collected: 03/21/22 10:56

Matrix: Solid

Date Received: 03/23/22 14:11

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	22418	03/28/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22425	03/28/22 20:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22500	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22321	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		10			22721	03/31/22 14:06	SC	XEN MID

Client Sample ID: PH01B

Lab Sample ID: 880-12799-3

Date Collected: 03/21/22 11:51

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 15:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22500	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22321	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		5			22721	03/31/22 14:32	SC	XEN MID

## Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12799-1  
SDG: 32.816111, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12799-1	PH01	Solid	03/17/22 09:03	03/23/22 14:11	1
880-12799-2	PH01A	Solid	03/21/22 10:56	03/23/22 14:11	3
880-12799-3	PH01B	Solid	03/21/22 11:51	03/23/22 14:11	4

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14





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

## Chain of Custody

Work Order No: 12799

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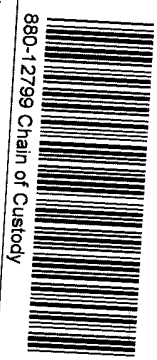
Project Manager	Kaler Jennings	Bill to (if different)	Kaler Jennings
Company Name	WSP USA Inc	Company Name	WSP USA Inc
Address	3300 North A Street Bldg 1, Unit 222	Address	
City State ZIP	Midland, TX 79705	City State ZIP	
Phone	817-683-2503	Email	kaler.jennings@wsp.com

Work Order Comments	
Program	UST/PS <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	Level <input type="checkbox"/> PST/US <input type="checkbox"/> TRR <input type="checkbox"/> Level <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	LEAMEX 8 BATTERY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number	3403710.000	27.02	
Project Location	32.4111, -103.621202		
Sampler's Name	Hadlie Green	Due Date	5/24/21
PO #			

SAMPLE RECEIPT	Temp Blank	Yes	No	Well Ice	Yes	No
Temperature (°C)	4.4/4.3			Thermometer ID		
Received Intact:	Yes	No		Correction Factor		
Cooler Custody Seals	Yes	No				
Sample Custody Seals	Yes	No		Total Containers		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
PH01	SL	3-17-22	09:03	1	1	BTEX (EPA 0-8021)	HN03 HN	
PH01A		3-21-22	10:56	3	3	TPH (EPA 8015)	H2SO4 H2	
PH01B		3-21-22	11:51	4	4	CHLORIDES (EPA 300)	HCL HL	
							None NO	
							NaOH Na	
							MeOH Me	
							Zn Acetate+ NaOH Zn	



880-12799 Chain of Custody

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12799-1

SDG Number: 32.816111, -103.621202

Login Number: 12799

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 880-12800-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:08:16 PM

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

#### LINKS

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

Qualifier	Qualifier Description
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
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12800-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12800-1****Receipt**

The samples were received on 3/23/2022 2:11 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22243 and analytical batch 880-22424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

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: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH02

Lab Sample ID: 880-12800-1

Date Collected: 03/17/22 09:10

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 15:28	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 15:28	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 15:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/25/22 14:00	03/27/22 15:28	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 15:28	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/25/22 14:00	03/27/22 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/25/22 14:00	03/27/22 15:28	1
1,4-Difluorobenzene (Surr)	112		70 - 130	03/25/22 14:00	03/27/22 15:28	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 18:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	03/24/22 08:49	03/24/22 18:50	1
o-Terphenyl	121		70 - 130	03/24/22 08:49	03/24/22 18:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5470		49.8	mg/Kg			03/31/22 14:41	10

Client Sample ID: PH02A

Lab Sample ID: 880-12800-2

Date Collected: 03/21/22 11:03

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 15:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 15:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/25/22 14:00	03/27/22 15:49	1

Eurofins Midland



## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH02A

Lab Sample ID: 880-12800-2

Date Collected: 03/21/22 11:03

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 15:49	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 15:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/22 08:49	03/24/22 15:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 08:49	03/24/22 15:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			03/24/22 08:49	03/24/22 15:41	1
o-Terphenyl	122		70 - 130			03/24/22 08:49	03/24/22 15:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	797		24.8	mg/Kg			03/31/22 15:07	5

Client Sample ID: PH02B

Lab Sample ID: 880-12800-3

Date Collected: 03/21/22 12:00

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 16:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	03/25/22 14:00	03/27/22 16:09	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 16:09	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			03/24/22 19:46	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH02B

Lab Sample ID: 880-12800-3

Date Collected: 03/21/22 12:00

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 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	<49.7	U	49.7	mg/Kg		03/24/22 08:49	03/24/22 16:02	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		03/24/22 08:49	03/24/22 16:02	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		03/24/22 08:49	03/24/22 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			03/24/22 08:49	03/24/22 16:02	1
o-Terphenyl	117		70 - 130			03/24/22 08:49	03/24/22 16:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3000		25.0	mg/Kg			03/31/22 15:16	5

Client Sample ID: PH02C

Lab Sample ID: 880-12800-4

Date Collected: 03/22/22 10:07

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 14:00	03/27/22 16:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			03/25/22 14:00	03/27/22 16:30	1
1,4-Difluorobenzene (Surr)	111		70 - 130			03/25/22 14:00	03/27/22 16:30	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.6		50.0	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 16:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 16:24	1
Oil Range Organics (Over C28-C36)	71.6		50.0	mg/Kg		03/24/22 08:49	03/24/22 16:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			03/24/22 08:49	03/24/22 16:24	1
o-Terphenyl	119		70 - 130			03/24/22 08:49	03/24/22 16:24	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

## Client Sample ID: PH02C

## Lab Sample ID: 880-12800-4

Date Collected: 03/22/22 10:07

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1810		24.9	mg/Kg			03/31/22 15:24	5

## Client Sample ID: PH02D

## Lab Sample ID: 880-12800-5

Date Collected: 03/22/22 10:49

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 8.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 16:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			03/25/22 14:00	03/27/22 16:50	1
1,4-Difluorobenzene (Surr)	109		70 - 130			03/25/22 14:00	03/27/22 16:50	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 16:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 16:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 16:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/24/22 08:49	03/24/22 16:45	1
o-Terphenyl	103		70 - 130			03/24/22 08:49	03/24/22 16:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.1		4.96	mg/Kg			03/31/22 15:33	1

Eurofins Midland

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

## 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)
880-12800-1	PH02	110	112
880-12800-2	PH02A	105	108
880-12800-3	PH02B	107	108
880-12800-4	PH02C	108	111
880-12800-5	PH02D	106	109
890-2130-A-1-C MS	Matrix Spike	103	96
890-2130-A-1-D MSD	Matrix Spike Duplicate	103	102
LCS 880-22243/1-A	Lab Control Sample	103	112
LCSD 880-22243/2-A	Lab Control Sample Dup	103	113
MB 880-22243/5-A	Method Blank	100	102
MB 880-22286/5-A	Method Blank	101	103
<b>Surrogate Legend</b>			
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)
880-12790-A-9-C MS	Matrix Spike	102	90
880-12790-A-9-D MSD	Matrix Spike Duplicate	94	77
880-12800-1	PH02	120	121
880-12800-2	PH02A	120	122
880-12800-3	PH02B	115	117
880-12800-4	PH02C	119	119
880-12800-5	PH02D	105	103
LCS 880-22246/2-A	Lab Control Sample	114	119
LCSD 880-22246/3-A	Lab Control Sample Dup	119	123
MB 880-22246/1-A	Method Blank	117	125
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22243/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22243

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 14:00	03/27/22 13:44	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 13:44	1

Lab Sample ID: LCS 880-22243/1-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1116		mg/Kg		112	70 - 130
Toluene	0.100	0.1083		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1073		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22243/2-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1245		mg/Kg		124	70 - 130	11	35
Toluene	0.100	0.1183		mg/Kg		118	70 - 130	9	35
Ethylbenzene	0.100	0.1133		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130	5	35
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.0990	0.01306	F1	mg/Kg		13	70 - 130
Toluene	<0.00198	U F1	0.0990	0.01961	F1	mg/Kg		20	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U F1	0.0990	0.02046	F1	mg/Kg		21	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.198	0.04644	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00198	U F1	0.0990	0.02723	F1	mg/Kg		27	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2130-A-1-D MSD

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.01827	F1	mg/Kg		18	70 - 130	33	35
Toluene	<0.00198	U F1	0.100	0.01840	F1	mg/Kg		18	70 - 130	6	35
Ethylbenzene	<0.00198	U F1	0.100	0.02171	F1	mg/Kg		22	70 - 130	6	35
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.04688	F1	mg/Kg		23	70 - 130	1	35
o-Xylene	<0.00198	U F1	0.100	0.02815	F1	mg/Kg		28	70 - 130	3	35

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

Lab Sample ID: MB 880-22286/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22286

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/22 12:30	03/26/22 20:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 20:25	1

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

Lab Sample ID: MB 880-22246/1-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22246

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22246/1-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22246

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130			03/24/22 08:49	03/24/22 11:17	1
o-Terphenyl	125		70 - 130			03/24/22 08:49	03/24/22 11:17	1

Lab Sample ID: LCS 880-22246/2-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	910.2		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1169		mg/Kg		117	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	114		70 - 130				
o-Terphenyl	119		70 - 130				

Lab Sample ID: LCSD 880-22246/3-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	949.6		mg/Kg		95	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1220		mg/Kg		122	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: 880-12790-A-9-C MS

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22246

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	998	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1060		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	90		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12790-A-9-D MSD

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	989.4		mg/Kg		99	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	935.7		mg/Kg		89	70 - 130	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	77		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12799-A-2-G MS

Matrix: Solid

Analysis Batch: 22721

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	5140		2500	7478		mg/Kg		94	90 - 110

Lab Sample ID: 880-12799-A-2-H MSD

Matrix: Solid

Analysis Batch: 22721

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	5140		2500	7546		mg/Kg		97	90 - 110	1	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 22243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	5035	
880-12800-2	PH02A	Total/NA	Solid	5035	
880-12800-3	PH02B	Total/NA	Solid	5035	
880-12800-4	PH02C	Total/NA	Solid	5035	
880-12800-5	PH02D	Total/NA	Solid	5035	
MB 880-22243/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 22286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22286/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	8021B	22243
880-12800-2	PH02A	Total/NA	Solid	8021B	22243
880-12800-3	PH02B	Total/NA	Solid	8021B	22243
880-12800-4	PH02C	Total/NA	Solid	8021B	22243
880-12800-5	PH02D	Total/NA	Solid	8021B	22243
MB 880-22243/5-A	Method Blank	Total/NA	Solid	8021B	22243
MB 880-22286/5-A	Method Blank	Total/NA	Solid	8021B	22286
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	8021B	22243
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22243
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	22243
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22243

## Analysis Batch: 22501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	Total BTEX	
880-12800-2	PH02A	Total/NA	Solid	Total BTEX	
880-12800-3	PH02B	Total/NA	Solid	Total BTEX	
880-12800-4	PH02C	Total/NA	Solid	Total BTEX	
880-12800-5	PH02D	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	8015B NM	22246
880-12800-2	PH02A	Total/NA	Solid	8015B NM	22246
880-12800-3	PH02B	Total/NA	Solid	8015B NM	22246
880-12800-4	PH02C	Total/NA	Solid	8015B NM	22246
880-12800-5	PH02D	Total/NA	Solid	8015B NM	22246
MB 880-22246/1-A	Method Blank	Total/NA	Solid	8015B NM	22246
LCS 880-22246/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22246
LCSD 880-22246/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22246
880-12790-A-9-C MS	Matrix Spike	Total/NA	Solid	8015B NM	22246
880-12790-A-9-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22246

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

## GC Semi VOA

## Prep Batch: 22246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	8015NM Prep	
880-12800-2	PH02A	Total/NA	Solid	8015NM Prep	
880-12800-3	PH02B	Total/NA	Solid	8015NM Prep	
880-12800-4	PH02C	Total/NA	Solid	8015NM Prep	
880-12800-5	PH02D	Total/NA	Solid	8015NM Prep	
MB 880-22246/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22246/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22246/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12790-A-9-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12790-A-9-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Total/NA	Solid	8015 NM	
880-12800-2	PH02A	Total/NA	Solid	8015 NM	
880-12800-3	PH02B	Total/NA	Solid	8015 NM	
880-12800-4	PH02C	Total/NA	Solid	8015 NM	
880-12800-5	PH02D	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Soluble	Solid	DI Leach	
880-12800-2	PH02A	Soluble	Solid	DI Leach	
880-12800-3	PH02B	Soluble	Solid	DI Leach	
880-12800-4	PH02C	Soluble	Solid	DI Leach	
880-12800-5	PH02D	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12799-A-2-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12799-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12800-1	PH02	Soluble	Solid	300.0	22470
880-12800-2	PH02A	Soluble	Solid	300.0	22470
880-12800-3	PH02B	Soluble	Solid	300.0	22470
880-12800-4	PH02C	Soluble	Solid	300.0	22470
880-12800-5	PH02D	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12799-A-2-G MS	Matrix Spike	Soluble	Solid	300.0	22470
880-12799-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22470

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## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH02

Lab Sample ID: 880-12800-1

Date Collected: 03/17/22 09:10

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 15:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22501	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22315	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		10			22721	03/31/22 14:41	SC	XEN MID

Client Sample ID: PH02A

Lab Sample ID: 880-12800-2

Date Collected: 03/21/22 11:03

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 15:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22501	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22315	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 15:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		5			22721	03/31/22 15:07	SC	XEN MID

Client Sample ID: PH02B

Lab Sample ID: 880-12800-3

Date Collected: 03/21/22 12:00

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 16:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22501	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22315	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 16:02	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		5			22721	03/31/22 15:16	SC	XEN MID

Client Sample ID: PH02C

Lab Sample ID: 880-12800-4

Date Collected: 03/22/22 10:07

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 16:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22501	03/28/22 13:11	AJ	XEN MID

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## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH02C

Lab Sample ID: 880-12800-4

Date Collected: 03/22/22 10:07

Matrix: Solid

Date Received: 03/23/22 14:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22315	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		5			22721	03/31/22 15:24	SC	XEN MID

Client Sample ID: PH02D

Lab Sample ID: 880-12800-5

Date Collected: 03/22/22 10:49

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 16:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22501	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22315	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 16:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 15:33	SC	XEN MID

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Midland

## Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12800-1  
SDG: 32.816111, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12800-1	PH02	Solid	03/17/22 09:10	03/23/22 14:11	1
880-12800-2	PH02A	Solid	03/21/22 11:03	03/23/22 14:11	3.5
880-12800-3	PH02B	Solid	03/21/22 12:00	03/23/22 14:11	5
880-12800-4	PH02C	Solid	03/22/22 10:07	03/23/22 14:11	6
880-12800-5	PH02D	Solid	03/22/22 10:49	03/23/22 14:11	8.5



## Chain of Custody

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



**880-12800 Chain of Custody**

[illegible]



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12800-1

SDG Number: 32.816111, -103.621202

Login Number: 12800

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 880-12802-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
4/1/2022 6:07:43 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12802-1****Laboratory: Eurofins Midland****Narrative****Job Narrative  
880-12802-1****Receipt**

The samples were received on 3/23/2022 2:11 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-22245 and analytical batch 880-22323 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22245 and analytical batch 880-22323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

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: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03

Lab Sample ID: 880-12802-1

Date Collected: 03/17/22 09:20

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 11:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 11:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 08:47	03/26/22 11:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 11:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 08:47	03/26/22 11:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 08:47	03/26/22 11:00	1
1,4-Difluorobenzene (Surr)	109		70 - 130	03/25/22 08:47	03/26/22 11:00	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			03/28/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 17:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 17:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	03/24/22 08:49	03/24/22 17:27	1
o-Terphenyl	118		70 - 130	03/24/22 08:49	03/24/22 17:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7450		99.0	mg/Kg			04/01/22 09:20	20

Client Sample ID: PH03A

Lab Sample ID: 880-12802-2

Date Collected: 03/21/22 11:10

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/25/22 08:47	03/26/22 11:20	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 08:47	03/26/22 11:20	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 08:47	03/26/22 11:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 08:47	03/26/22 11:20	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 08:47	03/26/22 11:20	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 08:47	03/26/22 11:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	03/25/22 08:47	03/26/22 11:20	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03A

Lab Sample ID: 880-12802-2

Date Collected: 03/21/22 11:10

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	03/25/22 08:47	03/26/22 11:20	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/28/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 17:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/22 08:49	03/24/22 17:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 08:49	03/24/22 17:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			03/24/22 08:49	03/24/22 17:48	1
o-Terphenyl	119		70 - 130			03/24/22 08:49	03/24/22 17:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3250		50.0	mg/Kg			04/01/22 09:47	10

Client Sample ID: PH03B

Lab Sample ID: 880-12802-3

Date Collected: 03/21/22 12:09

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/25/22 08:47	03/26/22 11:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 08:47	03/26/22 11:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 08:47	03/26/22 11:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 08:47	03/26/22 11:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 08:47	03/26/22 11:41	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 08:47	03/26/22 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/25/22 08:47	03/26/22 11:41	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 08:47	03/26/22 11:41	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/28/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 19:46	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03B

Lab Sample ID: 880-12802-3

Date Collected: 03/21/22 12:09

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			03/24/22 08:49	03/24/22 18:09	1
o-Terphenyl	112		70 - 130			03/24/22 08:49	03/24/22 18:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1270		25.0	mg/Kg			04/01/22 09:56	5

Client Sample ID: PH03C

Lab Sample ID: 880-12802-4

Date Collected: 03/21/22 14:36

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/25/22 08:47	03/26/22 12:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			03/25/22 08:47	03/26/22 12:01	1
1,4-Difluorobenzene (Surr)	109		70 - 130			03/25/22 08:47	03/26/22 12:01	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/28/22 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 19:46	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		03/24/22 08:49	03/24/22 18:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:49	03/24/22 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			03/24/22 08:49	03/24/22 18:29	1
o-Terphenyl	126		70 - 130			03/24/22 08:49	03/24/22 18:29	1

Eurofins Midland



Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03C  
Date Collected: 03/21/22 14:36  
Date Received: 03/23/22 14:11  
Sample Depth: 6

Lab Sample ID: 880-12802-4  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	504		25.1	mg/Kg			04/01/22 10:04	5	

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

## 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)
880-12790-A-4-G MS	Matrix Spike	109	106
880-12790-A-4-H MSD	Matrix Spike Duplicate	109	110
880-12802-1	PH03	108	109
880-12802-2	PH03A	106	109
880-12802-3	PH03B	104	108
880-12802-4	PH03C	107	109
LCS 880-22245/1-A	Lab Control Sample	106	112
LCSD 880-22245/2-A	Lab Control Sample Dup	105	112
MB 880-21822/5-A	Method Blank	103	105
MB 880-22245/5-A	Method Blank	98	103

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-12790-A-9-C MS	Matrix Spike	102	90
880-12790-A-9-D MSD	Matrix Spike Duplicate	94	77
880-12802-1	PH03	115	118
880-12802-2	PH03A	116	119
880-12802-3	PH03B	113	112
880-12802-4	PH03C	123	126
LCS 880-22246/2-A	Lab Control Sample	114	119
LCSD 880-22246/3-A	Lab Control Sample Dup	119	123
MB 880-22246/1-A	Method Blank	117	125

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-21822/5-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21822

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/22/22 13:53	03/25/22 21:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/22/22 13:53	03/25/22 21:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/22/22 13:53	03/25/22 21:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/22/22 13:53	03/25/22 21:37	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/22/22 13:53	03/25/22 21:37	1

Lab Sample ID: MB 880-22245/5-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22245

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 08:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 08:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 08:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 08:47	03/26/22 08:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 08:47	03/26/22 08:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 08:47	03/26/22 08:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/25/22 08:47	03/26/22 08:34	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 08:47	03/26/22 08:34	1

Lab Sample ID: LCS 880-22245/1-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09706		mg/Kg		97	70 - 130
Toluene	0.100	0.09553		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09820		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1996		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1011		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22245/2-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22245

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08954		mg/Kg		90	70 - 130	8	35

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: LCSD 880-22245/2-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22245

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08838		mg/Kg		88	70 - 130	8	35
Ethylbenzene	0.100	0.09248		mg/Kg		92	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1892		mg/Kg		95	70 - 130	5	35
o-Xylene	0.100	0.09514		mg/Kg		95	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-12790-A-4-G MS

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1 F2	0.101	0.04676	F1	mg/Kg		46	70 - 130
Toluene	<0.00200	U F1 F2	0.101	0.04985	F1	mg/Kg		49	70 - 130
Ethylbenzene	<0.00200	U F1 F2	0.101	0.05415	F1	mg/Kg		53	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.202	0.1139	F1	mg/Kg		55	70 - 130
o-Xylene	0.00205	F1	0.101	0.05957	F1	mg/Kg		57	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-12790-A-4-H MSD

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22245

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.0996	0.07853	F2	mg/Kg		79	70 - 130	51	35
Toluene	<0.00200	U F1 F2	0.0996	0.07773	F2	mg/Kg		78	70 - 130	44	35
Ethylbenzene	<0.00200	U F1 F2	0.0996	0.08062	F2	mg/Kg		80	70 - 130	39	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1656	F2	mg/Kg		82	70 - 130	37	35
o-Xylene	0.00205	F1	0.0996	0.08390		mg/Kg		82	70 - 130	34	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

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

Lab Sample ID: MB 880-22246/1-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22246

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22246/1-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22246

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:49	03/24/22 11:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130			03/24/22 08:49	03/24/22 11:17	1
o-Terphenyl	125		70 - 130			03/24/22 08:49	03/24/22 11:17	1

Lab Sample ID: LCS 880-22246/2-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	910.2		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1169		mg/Kg		117	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	114		70 - 130				
o-Terphenyl	119		70 - 130				

Lab Sample ID: LCSD 880-22246/3-A

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	949.6		mg/Kg		95	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1220		mg/Kg		122	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: 880-12790-A-9-C MS

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22246

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	998	970.1		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1060		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	90		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12790-A-9-D MSD

Matrix: Solid

Analysis Batch: 22241

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22246

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	989.4		mg/Kg		99	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	935.7		mg/Kg		89	70 - 130	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	77		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22471/1-A

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/01/22 08:54	1

Lab Sample ID: LCS 880-22471/2-A

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.2		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-22471/3-A

Matrix: Solid

Analysis Batch: 22735

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	237.5		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-12802-1 MS

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: PH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7450		4950	12240		mg/Kg		97	90 - 110

Lab Sample ID: 880-12802-1 MSD

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: PH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7450		4950	12060		mg/Kg		93	90 - 110	1	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 21822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21822/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 22245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	5035	
880-12802-2	PH03A	Total/NA	Solid	5035	
880-12802-3	PH03B	Total/NA	Solid	5035	
880-12802-4	PH03C	Total/NA	Solid	5035	
MB 880-22245/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22245/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22245/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12790-A-4-G MS	Matrix Spike	Total/NA	Solid	5035	
880-12790-A-4-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 22323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	8021B	22245
880-12802-2	PH03A	Total/NA	Solid	8021B	22245
880-12802-3	PH03B	Total/NA	Solid	8021B	22245
880-12802-4	PH03C	Total/NA	Solid	8021B	22245
MB 880-21822/5-A	Method Blank	Total/NA	Solid	8021B	21822
MB 880-22245/5-A	Method Blank	Total/NA	Solid	8021B	22245
LCS 880-22245/1-A	Lab Control Sample	Total/NA	Solid	8021B	22245
LCSD 880-22245/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22245
880-12790-A-4-G MS	Matrix Spike	Total/NA	Solid	8021B	22245
880-12790-A-4-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22245

## Analysis Batch: 22487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	Total BTEX	
880-12802-2	PH03A	Total/NA	Solid	Total BTEX	
880-12802-3	PH03B	Total/NA	Solid	Total BTEX	
880-12802-4	PH03C	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	8015B NM	22246
880-12802-2	PH03A	Total/NA	Solid	8015B NM	22246
880-12802-3	PH03B	Total/NA	Solid	8015B NM	22246
880-12802-4	PH03C	Total/NA	Solid	8015B NM	22246
MB 880-22246/1-A	Method Blank	Total/NA	Solid	8015B NM	22246
LCS 880-22246/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22246
LCSD 880-22246/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22246
880-12790-A-9-C MS	Matrix Spike	Total/NA	Solid	8015B NM	22246
880-12790-A-9-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22246

## Prep Batch: 22246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

## GC Semi VOA (Continued)

## Prep Batch: 22246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-2	PH03A	Total/NA	Solid	8015NM Prep	
880-12802-3	PH03B	Total/NA	Solid	8015NM Prep	
880-12802-4	PH03C	Total/NA	Solid	8015NM Prep	
MB 880-22246/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22246/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22246/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12790-A-9-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12790-A-9-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Total/NA	Solid	8015 NM	
880-12802-2	PH03A	Total/NA	Solid	8015 NM	
880-12802-3	PH03B	Total/NA	Solid	8015 NM	
880-12802-4	PH03C	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Soluble	Solid	DI Leach	
880-12802-2	PH03A	Soluble	Solid	DI Leach	
880-12802-3	PH03B	Soluble	Solid	DI Leach	
880-12802-4	PH03C	Soluble	Solid	DI Leach	
MB 880-22471/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22471/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22471/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12802-1 MS	PH03	Soluble	Solid	DI Leach	
880-12802-1 MSD	PH03	Soluble	Solid	DI Leach	

## Analysis Batch: 22735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12802-1	PH03	Soluble	Solid	300.0	22471
880-12802-2	PH03A	Soluble	Solid	300.0	22471
880-12802-3	PH03B	Soluble	Solid	300.0	22471
880-12802-4	PH03C	Soluble	Solid	300.0	22471
MB 880-22471/1-A	Method Blank	Soluble	Solid	300.0	22471
LCS 880-22471/2-A	Lab Control Sample	Soluble	Solid	300.0	22471
LCSD 880-22471/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22471
880-12802-1 MS	PH03	Soluble	Solid	300.0	22471
880-12802-1 MSD	PH03	Soluble	Solid	300.0	22471



## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03

Lab Sample ID: 880-12802-1

Date Collected: 03/17/22 09:20

Matrix: Solid

Date Received: 03/23/22 14:11

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	22245	03/25/22 08:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 11:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22487	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22316	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 17:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		20			22735	04/01/22 09:20	CH	XEN MID

Client Sample ID: PH03A

Lab Sample ID: 880-12802-2

Date Collected: 03/21/22 11:10

Matrix: Solid

Date Received: 03/23/22 14:11

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	22245	03/25/22 08:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 11:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22487	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22316	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 17:48	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		10			22735	04/01/22 09:47	CH	XEN MID

Client Sample ID: PH03B

Lab Sample ID: 880-12802-3

Date Collected: 03/21/22 12:09

Matrix: Solid

Date Received: 03/23/22 14:11

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	22245	03/25/22 08:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 11:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22487	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22316	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 18:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		5			22735	04/01/22 09:56	CH	XEN MID

Client Sample ID: PH03C

Lab Sample ID: 880-12802-4

Date Collected: 03/21/22 14:36

Matrix: Solid

Date Received: 03/23/22 14:11

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	22245	03/25/22 08:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 12:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22487	03/28/22 12:44	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH03C  
Date Collected: 03/21/22 14:36  
Date Received: 03/23/22 14:11

Lab Sample ID: 880-12802-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			22316	03/24/22 19:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	22246	03/24/22 08:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22241	03/24/22 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		5			22735	04/01/22 10:04	CH	XEN MID

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

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Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

## Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12802-1  
SDG: 32.816111, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12802-1	PH03	Solid	03/17/22 09:20	03/23/22 14:11	1
880-12802-2	PH03A	Solid	03/21/22 11:10	03/23/22 14:11	3
880-12802-3	PH03B	Solid	03/21/22 12:09	03/23/22 14:11	4.5
880-12802-4	PH03C	Solid	03/21/22 14:36	03/23/22 14:11	6



## Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 302-0300 San Antonio TX (210) 509-3334  
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1266  
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900  
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6700  
Atlanta GA (770) 449-8800

Work Order No: 128002

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

**Work Order Comments**

Program ☐ UST/☐ P/☐ ST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project


Reporting Level ☒ Level I ☐ PST/UST ☐ TRR ☐ Level IV

Deliverables EDD ☒ ADAPT ☐ Other

Project Name	LEAMEX 3 BATTERY	Turn Around	
Project Number	3403720.000	21.02	Routine <input checked="" type="checkbox"/>
Project Location	32.0101116 -103.621702	Rush	<input type="checkbox"/>
Sampler's Name		Hadlie Green	Due Date 5/24/11
PO #			
<b>SAMPLE RECEIPT</b>			
Temperature (°C)	44.3	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID	108
Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor	-1
		Total Containers	
Number of Containers/Preservative Code			
EPA 0=8021)			
EPA 8015)			
IDES (EPA 300)			
ANALYSIS REQUEST			
Preservative Codes			
HNO3	HN		
H2SO4	H2		
HCL	HL		
None	NO		
NaOH	Na		
MeOH	Me		
Zn Acetate+	NaOH Zn		

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	BTEX (E)	TPH (E)	CHLOR	Sample Comments
PH03	SL	3-17-22	0920	1	1	X	X	X	
PH03A		3-21-22	11:10	3	1	X	X	X	
PH03B		3-21-22	12:09	4.5	1	X	X	X	
PH03C		3-21-22	14:36	6	1	X	X	X	



880-12802 Chain of Custody

**880-12802 Chain of Custody**



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

[illegible]

**Total 200.7 / 6010      200.8 / 6020:**

[illegible]

1631 / 245.1 / 7470 / 7471 Hg

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 <i>Melanie Groer</i>	<i>[Signature]</i>	8/23/22	2		
		14:11	4		
5			6		

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12802-1

SDG Number: 32.816111, -103.621202

Login Number: 12802

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 880-12803-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
4/1/2022 6:07:57 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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



Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12803-1**

**Laboratory: Eurofins Midland**

**Narrative**

**Job Narrative**  
**880-12803-1**

**Receipt**

The samples were received on 3/23/2022 2:11 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22243 and analytical batch 880-22424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-22247 and analytical batch 880-22239 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

**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: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH06

Lab Sample ID: 880-12803-1

Date Collected: 03/17/22 09:44

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 17:11	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 17:11	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 17:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 17:11	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 17:11	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 17:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	03/25/22 14:00	03/27/22 17:11	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 17:11	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 12:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/24/22 08:53	03/24/22 12:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 08:53	03/24/22 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	03/24/22 08:53	03/24/22 12:19	1
o-Terphenyl	127		70 - 130	03/24/22 08:53	03/24/22 12:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5580		49.8	mg/Kg			04/01/22 10:13	10

Client Sample ID: PH06A

Lab Sample ID: 880-12803-2

Date Collected: 03/22/22 14:41

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/25/22 14:00	03/27/22 18:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/25/22 14:00	03/27/22 18:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/25/22 14:00	03/27/22 18:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/25/22 14:00	03/27/22 18:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/25/22 14:00	03/27/22 18:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/25/22 14:00	03/27/22 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 18:34	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH06A

Lab Sample ID: 880-12803-2

Date Collected: 03/22/22 14:41

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	03/25/22 14:00	03/27/22 18:34	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	73.0		49.9	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 15:41	1
Diesel Range Organics (Over C10-C28)	73.0		49.9	mg/Kg		03/24/22 08:53	03/24/22 15:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:53	03/24/22 15:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			03/24/22 08:53	03/24/22 15:41	1
o-Terphenyl	99		70 - 130			03/24/22 08:53	03/24/22 15:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1980		25.0	mg/Kg			04/01/22 10:40	5

Client Sample ID: PH06B

Lab Sample ID: 880-12803-3

Date Collected: 03/22/22 14:52

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 18:54	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 18:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 18:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 18:54	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 14:00	03/27/22 18:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 14:00	03/27/22 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 14:00	03/27/22 18:54	1
1,4-Difluorobenzene (Surr)	109		70 - 130	03/25/22 14:00	03/27/22 18:54	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.4		49.8	mg/Kg			03/24/22 19:53	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH06B  
Date Collected: 03/22/22 14:52  
Date Received: 03/23/22 14:11  
Sample Depth: 4

Lab Sample ID: 880-12803-3  
Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		03/24/22 08:53	03/24/22 16:02	1	
Diesel Range Organics (Over C10-C28)	50.4		49.8	mg/Kg		03/24/22 08:53	03/24/22 16:02	1	
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/24/22 08:53	03/24/22 16:02	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	115		70 - 130			03/24/22 08:53	03/24/22 16:02	1	
o-Terphenyl	113		70 - 130			03/24/22 08:53	03/24/22 16:02	1	

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	372		4.96	mg/Kg			04/01/22 10:49	1	

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

## 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)
880-12803-1	PH06	109	108
880-12803-2	PH06A	108	107
880-12803-3	PH06B	108	109
890-2130-A-1-C MS	Matrix Spike	103	96
890-2130-A-1-D MSD	Matrix Spike Duplicate	103	102
LCS 880-22243/1-A	Lab Control Sample	103	112
LCSD 880-22243/2-A	Lab Control Sample Dup	103	113
MB 880-22243/5-A	Method Blank	100	102
MB 880-22286/5-A	Method Blank	101	103
<b>Surrogate Legend</b>			
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)
880-12803-1	PH06	127	127
880-12803-1 MS	PH06	118	98
880-12803-1 MSD	PH06	104	85
880-12803-2	PH06A	97	99
880-12803-3	PH06B	115	113
LCS 880-22247/2-A	Lab Control Sample	111	105
LCSD 880-22247/3-A	Lab Control Sample Dup	95	88
MB 880-22247/1-A	Method Blank	119	124
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22243/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22243

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 14:00	03/27/22 13:44	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 13:44	1

Lab Sample ID: LCS 880-22243/1-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1116		mg/Kg		112	70 - 130
Toluene	0.100	0.1083		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1073		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22243/2-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1245		mg/Kg		124	70 - 130	11	35
Toluene	0.100	0.1183		mg/Kg		118	70 - 130	9	35
Ethylbenzene	0.100	0.1133		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130	5	35
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1	0.0990	0.01306	F1	mg/Kg		13	70 - 130
Toluene	<0.00198	U F1	0.0990	0.01961	F1	mg/Kg		20	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U F1	0.0990	0.02046	F1	mg/Kg		21	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.198	0.04644	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00198	U F1	0.0990	0.02723	F1	mg/Kg		27	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2130-A-1-D MSD

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.01827	F1	mg/Kg		18	70 - 130	33	35
Toluene	<0.00198	U F1	0.100	0.01840	F1	mg/Kg		18	70 - 130	6	35
Ethylbenzene	<0.00198	U F1	0.100	0.02171	F1	mg/Kg		22	70 - 130	6	35
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.04688	F1	mg/Kg		23	70 - 130	1	35
o-Xylene	<0.00198	U F1	0.100	0.02815	F1	mg/Kg		28	70 - 130	3	35

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

Lab Sample ID: MB 880-22286/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22286

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/22 12:30	03/26/22 20:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 20:25	1

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			03/24/22 08:53	03/24/22 11:17	1
o-Terphenyl	124		70 - 130			03/24/22 08:53	03/24/22 11:17	1

Lab Sample ID: LCS 880-22247/2-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	769.8		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1087		mg/Kg		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-22247/3-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	671.6	*-	mg/Kg		67	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	918.7		mg/Kg		92	70 - 130	17	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: 880-12803-1 MS

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: PH06

Prep Type: Total/NA

Prep Batch: 22247

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 *-	998	1227		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1212		mg/Kg		119	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	118		70 - 130						
o-Terphenyl	98		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12803-1 MSD

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: PH06

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	999	1018		mg/Kg		99	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1064		mg/Kg		104	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	85		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22471/1-A

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/01/22 08:54	1

Lab Sample ID: LCS 880-22471/2-A

Matrix: Solid

Analysis Batch: 22735

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.2		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-22471/3-A

Matrix: Solid

Analysis Batch: 22735

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	237.5		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-12802-A-1-F MS

Matrix: Solid

Analysis Batch: 22735

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	7450		4950	12240		mg/Kg		97	90 - 110

Lab Sample ID: 880-12802-A-1-G MSD

Matrix: Solid

Analysis Batch: 22735

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	7450		4950	12060		mg/Kg		93	90 - 110	1	20

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2125-A-1-G MS

Matrix: Solid

Analysis Batch: 22735

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	49.6		250	298.4		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2125-A-1-H MSD

Matrix: Solid

Analysis Batch: 22735

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	49.6		248	292.0		mg/Kg		98	90 - 110	2	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 22243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	5035	
880-12803-2	PH06A	Total/NA	Solid	5035	
880-12803-3	PH06B	Total/NA	Solid	5035	
MB 880-22243/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 22286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22286/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	8021B	22243
880-12803-2	PH06A	Total/NA	Solid	8021B	22243
880-12803-3	PH06B	Total/NA	Solid	8021B	22243
MB 880-22243/5-A	Method Blank	Total/NA	Solid	8021B	22243
MB 880-22286/5-A	Method Blank	Total/NA	Solid	8021B	22286
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	8021B	22243
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22243
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	22243
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22243

## Analysis Batch: 22502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	Total BTEX	
880-12803-2	PH06A	Total/NA	Solid	Total BTEX	
880-12803-3	PH06B	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	8015B NM	22247
880-12803-2	PH06A	Total/NA	Solid	8015B NM	22247
880-12803-3	PH06B	Total/NA	Solid	8015B NM	22247
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015B NM	22247
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22247
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22247
880-12803-1 MS	PH06	Total/NA	Solid	8015B NM	22247
880-12803-1 MSD	PH06	Total/NA	Solid	8015B NM	22247

## Prep Batch: 22247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	8015NM Prep	
880-12803-2	PH06A	Total/NA	Solid	8015NM Prep	
880-12803-3	PH06B	Total/NA	Solid	8015NM Prep	
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

## GC Semi VOA (Continued)

## Prep Batch: 22247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12803-1 MS	PH06	Total/NA	Solid	8015NM Prep	
880-12803-1 MSD	PH06	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Total/NA	Solid	8015 NM	
880-12803-2	PH06A	Total/NA	Solid	8015 NM	
880-12803-3	PH06B	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Soluble	Solid	DI Leach	
880-12803-2	PH06A	Soluble	Solid	DI Leach	
880-12803-3	PH06B	Soluble	Solid	DI Leach	
MB 880-22471/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22471/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22471/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12802-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12802-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2125-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2125-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 22735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12803-1	PH06	Soluble	Solid	300.0	22471
880-12803-2	PH06A	Soluble	Solid	300.0	22471
880-12803-3	PH06B	Soluble	Solid	300.0	22471
MB 880-22471/1-A	Method Blank	Soluble	Solid	300.0	22471
LCS 880-22471/2-A	Lab Control Sample	Soluble	Solid	300.0	22471
LCSD 880-22471/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22471
880-12802-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	22471
880-12802-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22471
890-2125-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	22471
890-2125-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22471

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH06

Lab Sample ID: 880-12803-1

Date Collected: 03/17/22 09:44

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 17:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22502	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22318	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 12:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		10			22735	04/01/22 10:13	CH	XEN MID

Client Sample ID: PH06A

Lab Sample ID: 880-12803-2

Date Collected: 03/22/22 14:41

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 18:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22502	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22318	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 15:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		5			22735	04/01/22 10:40	CH	XEN MID

Client Sample ID: PH06B

Lab Sample ID: 880-12803-3

Date Collected: 03/22/22 14:52

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 18:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22502	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22318	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 16:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	22471	03/28/22 11:01	CH	XEN MID
Soluble	Analysis	300.0		1			22735	04/01/22 10:49	CH	XEN MID

## Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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



## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12803-1  
SDG: 32.816111, -103.621202

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12803-1	PH06	Solid	03/17/22 09:44	03/23/22 14:11	1
880-12803-2	PH06A	Solid	03/22/22 14:41	03/23/22 14:11	2.5
880-12803-3	PH06B	Solid	03/22/22 14:52	03/23/22 14:11	4

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334  
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296  
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900  
Tampa FL (813) 820-2000 Tallahassee FL (904) 756-0747 Delray Beach FL (561) 889-6701  
Atlanta GA (770) 449-8800



880-12803 Chain of Custody

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

Project Name	LEAMEX 9 BATTERY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number	3403720.000	Due Date	27.02
Project Location	32.016111, -103.421202		
Sampler's Name	Hadlie Green		
PO #			

SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C)	44/43			Thermometer ID		
Received Intact	Yes	No		Correction Factor		
Cooler Custody Seals	Yes	No				
Sample Custody Seals	Yes	No		Total Containers		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
PH06	SL	3-17-22	0944	1	1 X	BTEX (EPA 0=8021)	HN03 HN	
PH06A		3-22-22	1441	2.5	1 X	TPH (EPA 8015)	H2S04 H2	
PH06B		3-22-22	1452	4	1 X	CHLORIDES (EPA 300)	HCL HL	
							None NO	
							NaOH Na	
							MeOH Me	
							Zn Acetate+ NaOH Zn	
								TAT starts the day received by the lab if received by 4:30pm

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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
Hadlie Green	Hadlie Green	3/23/22			
		14:11			



## Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 302-0300 San Antonio TX (210) 509-3334  
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 734-1296  
Hobbs NM (575) 392-7550 Carlsbad NM (505) 988-3199 Phoenix, AZ (480) 356-0800  
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6707  
Atlanta GA (770) 449-8800

Work Order No: 12799

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

**Work Order Comments**

Program  UST/PST ☐ RRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project.

Reporting Level ☐ Level I ☐ PST/US ☐ TRR ☐ Level II ☐

Deliverables EDD ☒ ADAPT ☐ Other

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12803-1

SDG Number: 32.816111, -103.621202

Login Number: 12803

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 880-12820-1

Laboratory Sample Delivery Group: 32.816111, -103.621202

Client Project/Site: Leamex 8 Battery

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
3/31/2022 5:08:47 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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



Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Laboratory Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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



## Case Narrative

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

**Job ID: 880-12820-1**

**Laboratory: Eurofins Midland**

**Narrative**

**Job Narrative**  
**880-12820-1**

**Receipt**

The samples were received on 3/23/2022 2:11 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22243 and analytical batch 880-22424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-22247 and analytical batch 880-22239 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

**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: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH05

Lab Sample ID: 880-12820-1

Date Collected: 03/22/22 13:40

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/25/22 14:00	03/27/22 19:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:15	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/25/22 14:00	03/27/22 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	03/25/22 14:00	03/27/22 19:15	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 19:15	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	136		49.7	mg/Kg			03/24/22 19:53	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	<49.7	U *	49.7	mg/Kg		03/24/22 08:53	03/24/22 16:24	1
Diesel Range Organics (Over C10-C28)	136		49.7	mg/Kg		03/24/22 08:53	03/24/22 16:24	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		03/24/22 08:53	03/24/22 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/24/22 08:53	03/24/22 16:24	1
o-Terphenyl	97		70 - 130	03/24/22 08:53	03/24/22 16:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		5.01	mg/Kg			03/31/22 15:42	1

Client Sample ID: PH05A

Lab Sample ID: 880-12820-2

Date Collected: 03/22/22 13:50

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:36	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/25/22 14:00	03/27/22 19:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 19:36	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/25/22 14:00	03/27/22 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	03/25/22 14:00	03/27/22 19:36	1

Eurofins Midland

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH05A

Lab Sample ID: 880-12820-2

Date Collected: 03/22/22 13:50

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	03/25/22 14:00	03/27/22 19:36	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	97.8		50.0	mg/Kg			03/24/22 19:53	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		03/24/22 08:53	03/24/22 16:45	1
Diesel Range Organics (Over C10-C28)	97.8		50.0	mg/Kg		03/24/22 08:53	03/24/22 16:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 16:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/24/22 08:53	03/24/22 16:45	1
o-Terphenyl	103		70 - 130			03/24/22 08:53	03/24/22 16:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.5		5.05	mg/Kg			03/31/22 15:50	1

Client Sample ID: PH05B

Lab Sample ID: 880-12820-3

Date Collected: 03/22/22 14:08

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 19:56	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 19:56	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 19:56	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/25/22 14:00	03/27/22 19:56	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/25/22 14:00	03/27/22 19:56	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/25/22 14:00	03/27/22 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/25/22 14:00	03/27/22 19:56	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/25/22 14:00	03/27/22 19:56	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/28/22 13:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	63.8		49.9	mg/Kg			03/24/22 19:53	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH05B

Lab Sample ID: 880-12820-3

Date Collected: 03/22/22 14:08

Matrix: Solid

Date Received: 03/23/22 14:11

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *-	49.9	mg/Kg		03/24/22 08:53	03/24/22 17:27	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>63.8</b>		49.9	mg/Kg		03/24/22 08:53	03/24/22 17:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/24/22 08:53	03/24/22 17:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			03/24/22 08:53	03/24/22 17:27	1
o-Terphenyl	115		70 - 130			03/24/22 08:53	03/24/22 17:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>53.0</b>		4.98	mg/Kg			03/31/22 15:59	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

## 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)
880-12820-1	PH05	107	102
880-12820-2	PH05A	111	111
880-12820-3	PH05B	105	107
890-2130-A-1-C MS	Matrix Spike	103	96
890-2130-A-1-D MSD	Matrix Spike Duplicate	103	102
LCS 880-22243/1-A	Lab Control Sample	103	112
LCSD 880-22243/2-A	Lab Control Sample Dup	103	113
MB 880-22243/5-A	Method Blank	100	102
MB 880-22286/5-A	Method Blank	101	103
<b>Surrogate Legend</b>			
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)
880-12803-A-1-C MS	Matrix Spike	118	98
880-12803-A-1-D MSD	Matrix Spike Duplicate	104	85
880-12820-1	PH05	98	97
880-12820-2	PH05A	105	103
880-12820-3	PH05B	115	115
LCS 880-22247/2-A	Lab Control Sample	111	105
LCSD 880-22247/3-A	Lab Control Sample Dup	95	88
MB 880-22247/1-A	Method Blank	119	124
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22243/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22243

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 14:00	03/27/22 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 14:00	03/27/22 13:44	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/25/22 14:00	03/27/22 13:44	1

Lab Sample ID: LCS 880-22243/1-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1116		mg/Kg		112	70 - 130
Toluene	0.100	0.1083		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1073		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-22243/2-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1245		mg/Kg		124	70 - 130	11	35
Toluene	0.100	0.1183		mg/Kg		118	70 - 130	9	35
Ethylbenzene	0.100	0.1133		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130	5	35
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.0990	0.01306	F1	mg/Kg		13	70 - 130
Toluene	<0.00198	U F1	0.0990	0.01961	F1	mg/Kg		20	70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 890-2130-A-1-C MS

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U F1	0.0990	0.02046	F1	mg/Kg		21	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.198	0.04644	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00198	U F1	0.0990	0.02723	F1	mg/Kg		27	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2130-A-1-D MSD

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22243

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.01827	F1	mg/Kg		18	70 - 130	33	35
Toluene	<0.00198	U F1	0.100	0.01840	F1	mg/Kg		18	70 - 130	6	35
Ethylbenzene	<0.00198	U F1	0.100	0.02171	F1	mg/Kg		22	70 - 130	6	35
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.04688	F1	mg/Kg		23	70 - 130	1	35
o-Xylene	<0.00198	U F1	0.100	0.02815	F1	mg/Kg		28	70 - 130	3	35

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

Lab Sample ID: MB 880-22286/5-A

Matrix: Solid

Analysis Batch: 22424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22286

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 12:30	03/26/22 20:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 12:30	03/26/22 20:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/22 12:30	03/26/22 20:25	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/25/22 12:30	03/26/22 20:25	1

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: MB 880-22247/1-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22247

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/24/22 08:53	03/24/22 11:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			03/24/22 08:53	03/24/22 11:17	1
o-Terphenyl	124		70 - 130			03/24/22 08:53	03/24/22 11:17	1

Lab Sample ID: LCS 880-22247/2-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	769.8		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1087		mg/Kg		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-22247/3-A

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	671.6	*-	mg/Kg		67	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	918.7		mg/Kg		92	70 - 130	17	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: 880-12803-A-1-C MS

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22247

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 *-	998	1227		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1212		mg/Kg		119	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	118		70 - 130						
o-Terphenyl	98		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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

Lab Sample ID: 880-12803-A-1-D MSD

Matrix: Solid

Analysis Batch: 22239

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *	999	1018		mg/Kg		99	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1064		mg/Kg		104	70 - 130	13	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	85		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22470/1-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/31/22 11:36	1

Lab Sample ID: LCS 880-22470/2-A

Matrix: Solid

Analysis Batch: 22721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-22470/3-A

Matrix: Solid

Analysis Batch: 22721

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	234.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-12799-A-2-G MS

Matrix: Solid

Analysis Batch: 22721

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	5140		2500	7478		mg/Kg		94	90 - 110

Lab Sample ID: 880-12799-A-2-H MSD

Matrix: Solid

Analysis Batch: 22721

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	5140		2500	7546		mg/Kg		97	90 - 110	1	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

## GC VOA

## Prep Batch: 22243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	5035	
880-12820-2	PH05A	Total/NA	Solid	5035	
880-12820-3	PH05B	Total/NA	Solid	5035	
MB 880-22243/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 22286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22286/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	8021B	22243
880-12820-2	PH05A	Total/NA	Solid	8021B	22243
880-12820-3	PH05B	Total/NA	Solid	8021B	22243
MB 880-22243/5-A	Method Blank	Total/NA	Solid	8021B	22243
MB 880-22286/5-A	Method Blank	Total/NA	Solid	8021B	22286
LCS 880-22243/1-A	Lab Control Sample	Total/NA	Solid	8021B	22243
LCSD 880-22243/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22243
890-2130-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	22243
890-2130-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22243

## Analysis Batch: 22503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	Total BTEX	
880-12820-2	PH05A	Total/NA	Solid	Total BTEX	
880-12820-3	PH05B	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 22239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	8015B NM	22247
880-12820-2	PH05A	Total/NA	Solid	8015B NM	22247
880-12820-3	PH05B	Total/NA	Solid	8015B NM	22247
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015B NM	22247
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22247
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22247
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	22247
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22247

## Prep Batch: 22247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	8015NM Prep	
880-12820-2	PH05A	Total/NA	Solid	8015NM Prep	
880-12820-3	PH05B	Total/NA	Solid	8015NM Prep	
MB 880-22247/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22247/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

## GC Semi VOA (Continued)

## Prep Batch: 22247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22247/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12803-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12803-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 22319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Total/NA	Solid	8015 NM	
880-12820-2	PH05A	Total/NA	Solid	8015 NM	
880-12820-3	PH05B	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 22470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Soluble	Solid	DI Leach	
880-12820-2	PH05A	Soluble	Solid	DI Leach	
880-12820-3	PH05B	Soluble	Solid	DI Leach	
MB 880-22470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12799-A-2-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12799-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 22721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12820-1	PH05	Soluble	Solid	300.0	22470
880-12820-2	PH05A	Soluble	Solid	300.0	22470
880-12820-3	PH05B	Soluble	Solid	300.0	22470
MB 880-22470/1-A	Method Blank	Soluble	Solid	300.0	22470
LCS 880-22470/2-A	Lab Control Sample	Soluble	Solid	300.0	22470
LCSD 880-22470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22470
880-12799-A-2-G MS	Matrix Spike	Soluble	Solid	300.0	22470
880-12799-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22470

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

Client Sample ID: PH05

Lab Sample ID: 880-12820-1

Date Collected: 03/22/22 13:40

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 19:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22503	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22319	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 15:42	SC	XEN MID

Client Sample ID: PH05A

Lab Sample ID: 880-12820-2

Date Collected: 03/22/22 13:50

Matrix: Solid

Date Received: 03/23/22 14:11

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	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 19:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22503	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22319	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 16:45	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 15:50	SC	XEN MID

Client Sample ID: PH05B

Lab Sample ID: 880-12820-3

Date Collected: 03/22/22 14:08

Matrix: Solid

Date Received: 03/23/22 14:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	22243	03/25/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22424	03/27/22 19:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22503	03/28/22 13:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22319	03/24/22 19:53	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	22247	03/24/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22239	03/24/22 17:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22470	03/28/22 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			22721	03/31/22 15:59	SC	XEN MID

## Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

Laboratory: Eurofins Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: Leamex 8 Battery

Job ID: 880-12820-1  
SDG: 32.816111, -103.621202

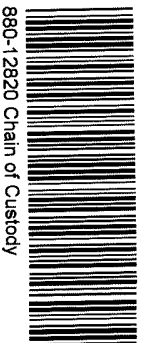
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12820-1	PH05	Solid	03/22/22 13:40	03/23/22 14:11	1
880-12820-2	PH05A	Solid	03/22/22 13:50	03/23/22 14:11	2
880-12820-3	PH05B	Solid	03/22/22 14:08	03/23/22 14:11	3

- 1
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- 12
- 13
- 14



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334  
Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296  
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900  
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 688-6701  
Atlanta GA (770) 449-8800



880-12820 Chain of Custody

www.xenco.com Page 1 of 1

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

Work Order Comments	
Program	UST/PSI <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	
Reporting Level	<input checked="" type="checkbox"/> Level I <input type="checkbox"/> PST/US <input type="checkbox"/> TRRP <input type="checkbox"/> Level II
Deliverables	EDD <input checked="" type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	LEAMEX 8 BATTERY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number	31403720.000	27.02	
Project Location	32.91611, -103.621202		
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #			

SAMPLE RECEIPT	Temp Blank	Yes <input checked="" type="checkbox"/> No	Wet Ice	Yes <input checked="" type="checkbox"/> No
Temperature (°C)	4.4/4.3	Thermometer ID		
Received Intact	Yes <input checked="" type="checkbox"/> No	Correction Factor		
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No	Total Containers		
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
PH05	SL	3-22-22	13:40	1	1 X	BTEX (EPA 0=8021)	HNO3 HN
PH05A				2	1 X	TPH (EPA 8015)	H2SO4 H2
PH05B				3	1 X	CHLORIDES (EPA 300)	HCL HL
							None NO
							NaOH Na
							MeOH Me
							Zn Acetate+ NaOH Zn
							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	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 Hg

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Hadlie Green		3/23/22			
		14.11			



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12820-1

SDG Number: 32.816111, -103.621202

Login Number: 12820

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



APPENDIX E

Final C-141

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

Incident ID	NAPP2200641724
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	ConocoPhillips	OGRID	217817
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688 - 9057
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2200641724
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

### Location of Release Source

Latitude 32.816111 Longitude -103.621202  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Leamex 8	Site Type	FlowLine
Date Release Discovered	December 20, 2021	API# (if applicable)	

Unit Letter	Section	Township	Range	County
M	24	17S	33E	Lea

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 104	Volume Recovered (bbls) 100
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

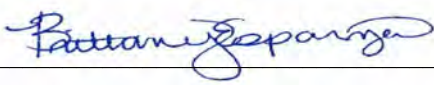
The release was caused by a Main Injection Line Underground Leak. The release occurred off pad. ConocoPhillips will have the spill area evaluated for any possible impact from the release.

Incident ID	NAPP2200641724
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The volume released was greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notification was given by Kelsy Waggaman via email December 21, 2021 at 11:34 AM to spills@slo.state.nm.us and ocd.enviro@state.nm.us.	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:     	
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 <b>Brittany N. Esparza</b>	Title: <b>Environmental Technician</b>
Signature: 	Date: <b>1/6/2022</b>
email: <b>Brittany.Esparza@ConocoPhillips.com</b>	Telephone: <b>(432) 221-0398</b>
<b><u>OCD Only</u></b>	
Received by: <b>Ramona Marcus</b>	Date: <b>1/6/2022</b>

## L48 Spill Volume Estimate Form

Page 3 of 3

Received by OCD: 1/6/2022 11:38:41 AM

Facility Name &amp; Number: Leamex 8 Battery Injection Line

Asset Area: Maljamar

NAPP2200641724

Release Discovery Date &amp; Time: 12/20/2021 10:00

Release Type: Produced Water

Provide any known details about the event: Main Injection Line Underground Leak

## Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?

See reference table below

Has it rained at least a half inch in the last 24 hours?

See reference table below

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	74.0	5.0	0.50	15.32%	2.744	0.420
Rectangle B	83.0	32.0	0.50	15.32%	19.699	3.018
Rectangle C	95.0	19.0	0.50	15.32%	13.387	2.051
Rectangle D	64.0	53.0	4.00	15.32%	201.259	30.833
Rectangle E	240.0	25.0	0.50	15.32%	44.500	6.817
Rectangle F					0.000	0.000
Rectangle G					0.000	0.000
Rectangle H					0.000	0.000
Rectangle I					0.000	0.000
					0.000	0.000
Total Volume Release:						43.139

Released to Imaging: 1/6/2022 4:34:04 PM

**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 70854

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 70854
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rmarcus	None	1/6/2022

Incident ID	NAPP2200641724
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;100</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 <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

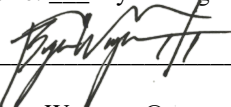
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NAPP2200641724
District RP	
Facility ID	
Application ID	

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist IISignature:  Date: 9/16/2022email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862**OCD Only**Received by: Jocelyn Harimon Date: 09/16/2022



Incident ID	NAPP2200641724
District RP	
Facility ID	
Application ID	

## Remediation Plan

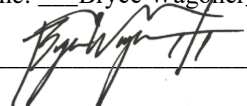
**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.


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: Bryce Wagoner Title: Permian HSE Specialist II  
Signature:  Date: 9/16/2022  
email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

**OCD Only**

Received by: Jocelyn Harimon Date: 09/16/2022

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 09/21/2022

**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 144163

**CONDITIONS**

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 144163
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Composite confirmation samples will be collected from the bottom of the excavation from areas representing no more than four hundred (400) square feet. Composite confirmation samples will be collected from the sidewalls of the excavation from areas representing no more than two hundred (200) square feet.	9/21/2022