



June 14, 2022

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

**Re: Closure Request
Macho Nacho 002H
Incident Number NAPP2200644754
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of COG Operating, LLC (COG), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities performed at the Macho Nacho 002H (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a crude oil flare fire at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, COG is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2200644754.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit E, Section 02, Township 24 South, Range 33 East, in Lea County, New Mexico (32.247778° N, 103.550278°W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On December 21, 2021, the dump controller failed and the high-level kill malfunctioned, causing approximately 1.3 barrels (bbls) of crude oil to release out of the flare. The released crude oil ignited and extinguished itself after reaching the ground. COG 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 NAPP2200644754.

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 less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-02308, located approximately 1.3

miles southwest of the Site. The groundwater well has a reported depth to groundwater of 20 feet bgs and a total depth of 40 feet bgs. Ground surface elevation at the groundwater well location is 3,593 feet above mean sea level (amsl), which is approximately 36 feet lower in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 5,200 feet southwest 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): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 19, 2021, site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Nine preliminary assessment soil samples (SS01 through SS09) were collected within and around the release extent from a depth of 0.5 feet bgs, to assess the lateral extent of the release. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The visible release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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

Laboratory analytical results for preliminary soil samples SS01, SS04, and SS06 indicated that TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for preliminary soil samples SS02, SS03, SS05, SS07, SS08, and SS09 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on visible staining in the release area and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On February 14, 2022 and May 25, 2022, Ensolum personnel were at the Site to perform delineation activities. Four boreholes (BH01 through BH04) were advanced via hand auger within the release extent

to assess the vertical extent of impacted soil. The boreholes were advanced to depths ranging from 1-foot to 2 feet bgs. Delineation soil samples were collected from the boreholes from depths ranging from 0.5 feet to 2 feet bgs. Soil from the boreholes was field screened for VOCs and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the boreholes were logged on lithologic soil sampling logs, which are included in Appendix B. The borehole and delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for the delineation samples from boreholes BH02 through BH04, collected at depths ranging from 0.5 feet to 2 feet bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for delineation sample BH01, collected at 0.5 feet bgs, indicated that TPH concentrations exceeded the Closure Criteria; subsequent delineation sample BH01A, collected at 1-foot bgs, was compliant with the Closure Criteria. Based on laboratory analytical results and field screening activities for the preliminary and delineation soil samples, the lateral and vertical extent of impacted soil was defined and excavation activities were warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Upon completion of delineation activities, impacted soil was excavated from the release area as indicated by visible staining, laboratory analytical results for the preliminary soil samples, and field screening results for the delineation soil samples. Excavation activities were performed using track-mounted backhoe and transport vehicle. To direct excavation activities, soil was screened for VOCs and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a depth of 1-foot bgs. Photographic documentation of the excavation activities is included in Appendix C.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS10 were collected from the floor of the excavation from a depth of 1-foot bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor samples. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.

The excavation measured approximately 1,900 square feet. A total of approximately 45 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico.

Laboratory analytical results for excavation floor samples FS01, FS02, and FS04 through FS10 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for floor sample FS03 indicated that TPH concentrations exceeded the Closure Criteria at 1-foot bgs. Additional soil was excavated in this area and subsequent sample FS03A, collected at 1.25 feet bgs, was compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the December 21, 2021, crude oil flare fire release. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no further remediation

Macho Nacho 002H



was required. COG will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

Excavation of impacted soil has mitigated impacts at this Site. COG believes the remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2200644754. The Final C-141 is included in Appendix F.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC

A handwritten signature in cursive script that reads "Kalei Jennings".

Kalei Jennings
Senior Scientist

A handwritten signature in cursive script that reads "Aimee Cole".

Aimee Cole
Senior Managing Scientist

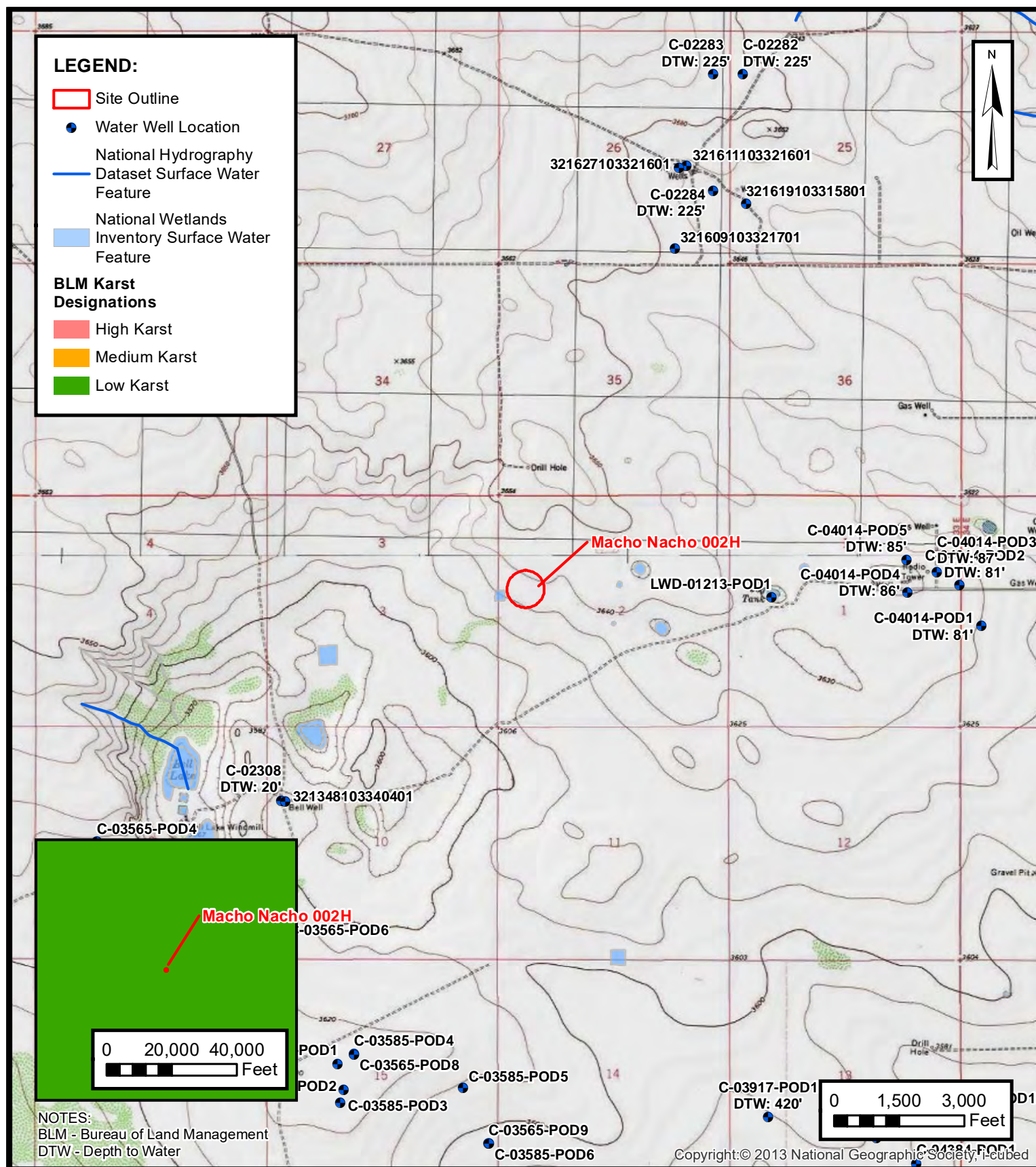
cc: Charles Beauvais, ConocoPhillips Company

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Sample Notification
Appendix F	Final C-141

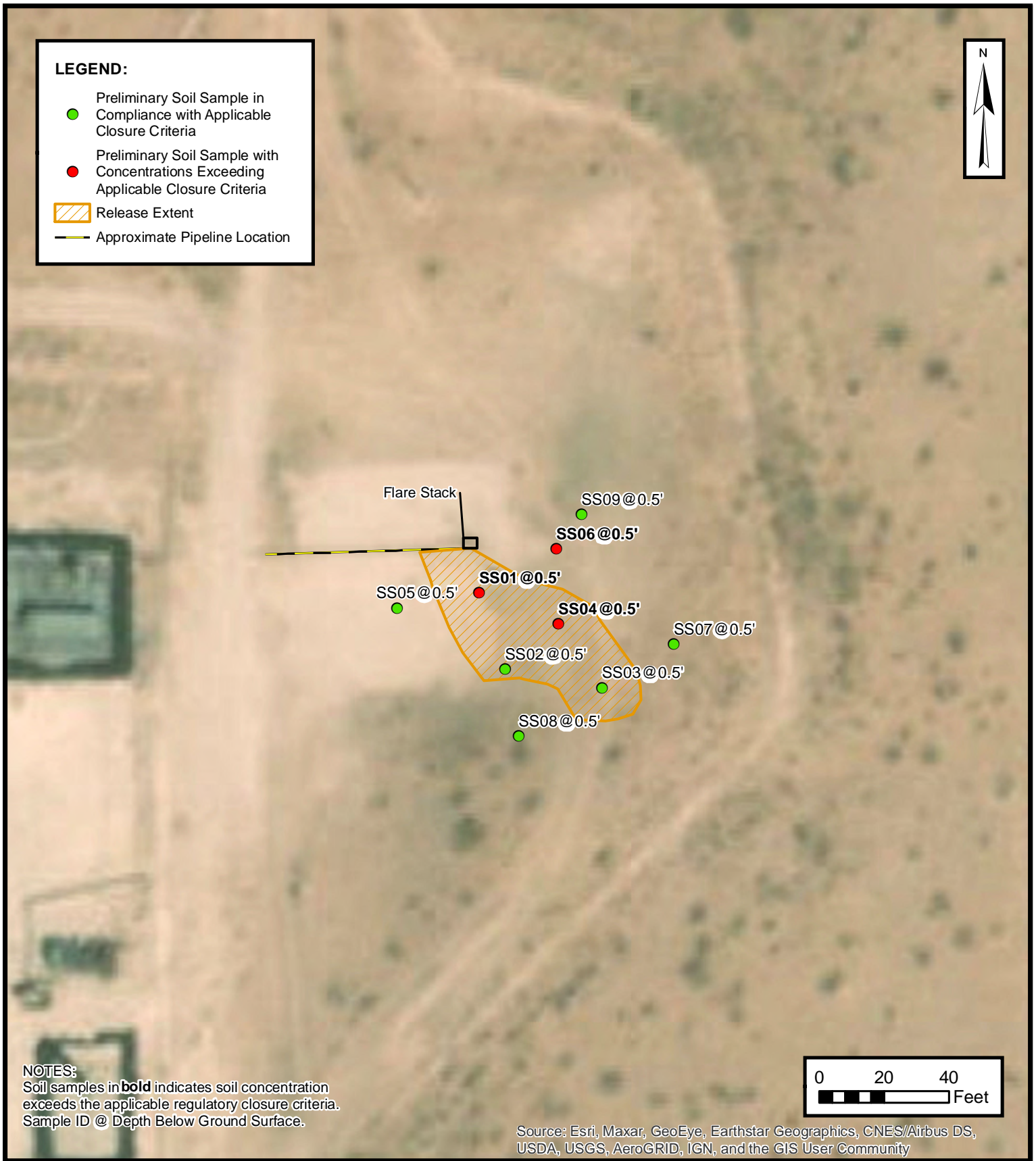


FIGURES



SITE LOCATION MAP

COG OPERATING, LLC
MACHO NACHO 002H
NAPP2200644754
Unit E, Sec 02, T24S, R33E
Lea County, New Mexico



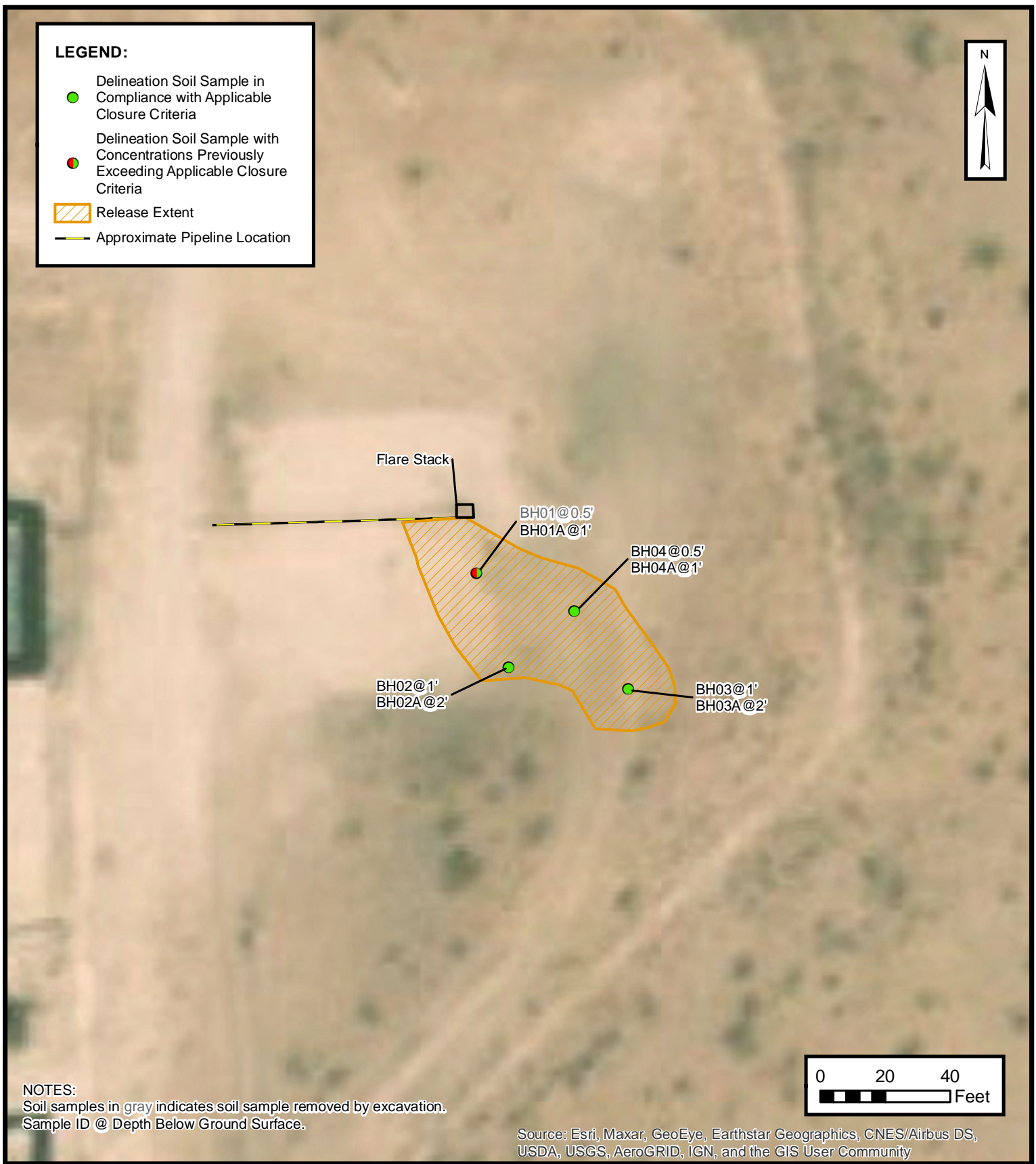
PRELIMINARY SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
MACHO NACHO 002H
NAPP2200644754
Unit E, Sec 02, T24S, R33E
Lea County, New Mexico

FIGURE

2

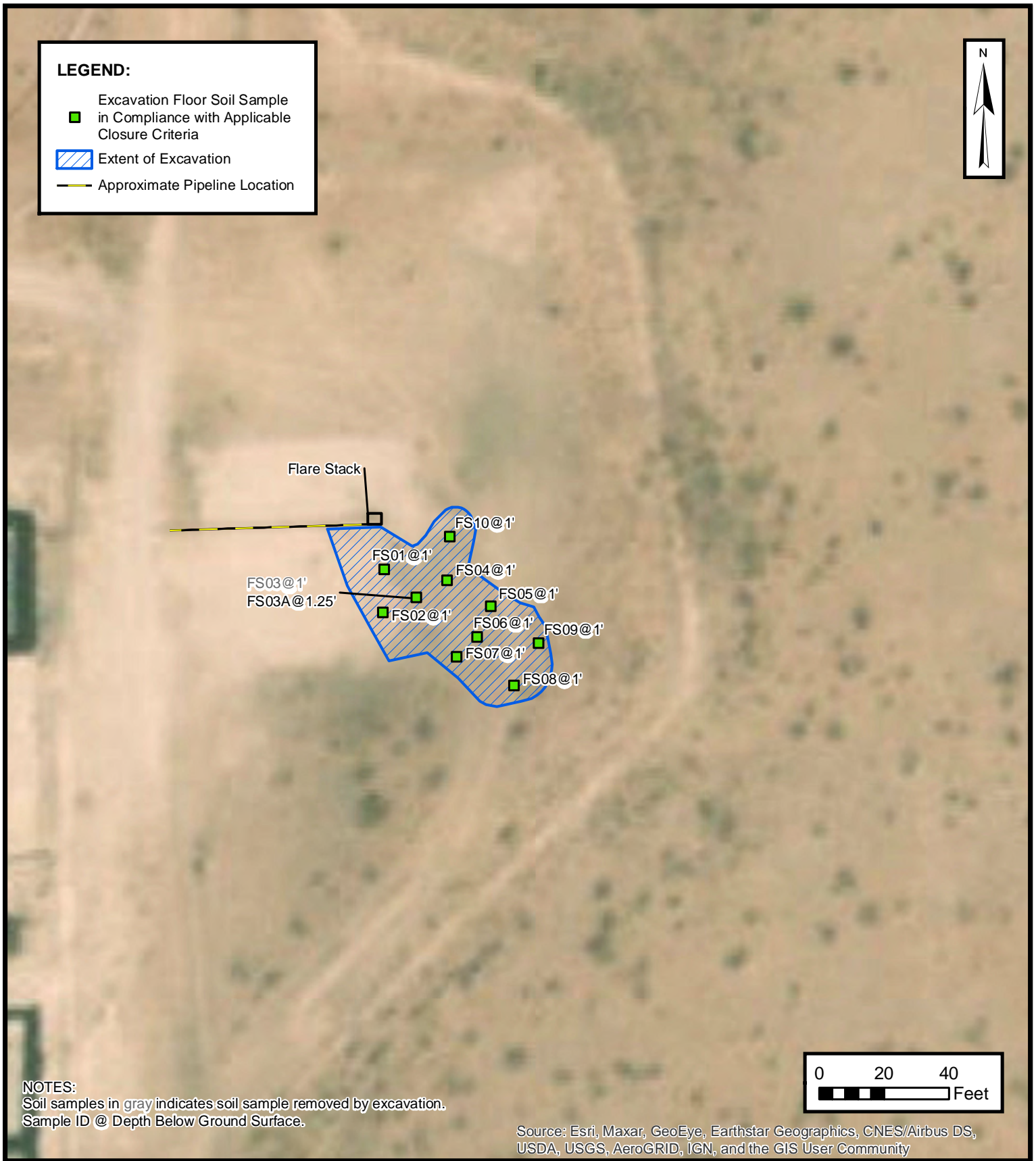
ENSOLUM
Environmental & Hydrogeologic Consultants



DELINEATION SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
MACHO NACHO 002H
NAPP2200644754
Unit E, Sec 02, T24S, R33E
Lea County, New Mexico

FIGURE
3



EXCAVATION SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
 MACHO NACHO 002H
 NAPP2200644754
 Unit E, Sec 02, T24S, R33E
 Lea County, New Mexico

FIGURE
4



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Macho Nacho 200H
 COG Operating, LLC
 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	NE	100	600
Preliminary Assessment Soil Samples										
SS01	12/19/2021	0.5	<0.00200	0.0327	<50.0	618	<50.0	618	618	202
SS02	12/19/2021	0.5	<0.00198	<0.00396	<49.9	88.4	<49.9	88.4	88.4	44.0
SS03	12/19/2021	0.5	<0.00200	0.00589	<50.0	78.8	<50.0	78.8	78.8	5.85
SS04	12/19/2021	0.5	<0.00199	<0.00398	<50.0	181	<50.0	181	181	10.7
SS05	12/19/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	14.3
SS06	12/19/2021	0.5	<0.00199	<0.00398	<50.0	501	<50.0	501	501	74.3
SS07	12/19/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	10.7
SS08	12/19/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	9.12
SS09	05/25/2022	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	11.1
Delineation Soil Samples										
BH01	02/14/2022	0.5	<0.00200	<0.00399	<50.0	252	<50.0	252	252	58.9
BH01A	02/14/2022	1	<0.00201	<0.00402	<49.9	54.0	<49.9	54.0	54.0	38.7
BH02	02/14/2022	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	5.39
BH02A	05/25/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	19.0
BH03	05/25/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	15.7
BH03A	05/25/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	39.2
BH04	02/14/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<4.97
BH04A	02/14/2022	1	<0.00199	<0.00398	<49.9	51.4	<49.9	51.4	51.4	19.8



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Macho Nacho 2H Battery
 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	NE	100	600
Excavation Floor Soil Samples										
FS01	03/23/2022	1	<0.00202	0.0147	<49.8	<49.8	<49.8	<49.8	<49.8	59.6
FS02	03/23/2022	1	<0.00199	<0.00398	<49.9	91.3	<49.9	91.3	91.3	71.4
FS03	03/23/2022	1	<0.00198	<0.00396	<50.0	109	<50.0	109	109	36.2
FS03A	05/25/2022	1.25	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	25.0
FS04	03/23/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	17.9
FS05	03/23/2022	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	<4.97
FS06	03/23/2022	1	<0.00199	<0.00398	<49.7	93.6	<49.7	93.6	93.6	6.62
FS07	03/23/2022	1	<0.00200	0.0381	<50.0	<50.0	<50.0	<50.0	<50.0	7.88
FS08	03/23/2022	1	<0.00200	<0.00399	<50.0	71.9	<50.0	71.9	71.9	8.51
FS09	03/23/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	<5.04
FS10	05/25/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	15.0

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

Water Right Summary



WR File Number: C 02308 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0 **Subfile:** - **Header:** -
Total Diversion: 3 **Cause/Case:** -
Owner: NGL WATER SOLUTIONS PERMIAN
Contact: R CHARLES WILKIN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
633154	COWNF	2018-09-17	CHG	PRC	C 02308	T		0	0	
207095	COWNF	2001-01-03	CHG	PRC	C 02308	T		0	0	
144622	DCL	1998-02-09	DCL	PRC	C 02308 AMENDMENT	T		0	3	
198285	DCL	1993-04-20	DCL	PRC	C 02308	T		0	3	

Current Points of Diversion

POD Number	Well Tag	Source	Q		Tw	Rng	(NAD83 UTM in meters)		Y	Other Location Desc
			64	Q16Q4			X			
C 02308			1	3	1	10	24S	33E	634953	3567364*

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number
12/31/1920	DCL	0	3	C 02308

Place of Use

Q	Q	Q		Tw	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	Q16	Q4									
						0	3		STK		DCL	NO PLACE OF USE GIVEN
						0	3		STK	06/30/1920	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		STK		GW
0	3		STK	06/30/1920	GW

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.


12/27/21 1:34 PM

WATER RIGHT
SUMMARY



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)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02308	1	3	1	10	24S	33E	634953	3567364* 
Driller License:		Driller Company:							
Driller Name: UNKNOWN									
Drill Start Date:	01/01/1920	Drill Finish Date:		06/30/1920		Plug Date:			
Log File Date:		PCW Rcv Date:				Source:			
Pump Type:		Pipe Discharge Size:				Estimated Yield: 15 GPM			
Casing Size:	6.63	Depth Well:		40 feet		Depth Water: 20 feet			

*UTM location was derived from PLSS - see Help

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.

12/27/21 1:34 PM

POINT OF DIVERSION SUMMARY



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[Contact USGS](#)
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National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Site Information Geographic Area: United States GO

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

USGS 321348103340401 24S.33E.10.13123

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°14'04.9", Longitude 103°34'02.4" NAD83
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 36 feet
Land surface altitude: 3,592 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1953-11-27	1996-03-13	7
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

[Questions about sites/data?](#)

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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321348103340401)

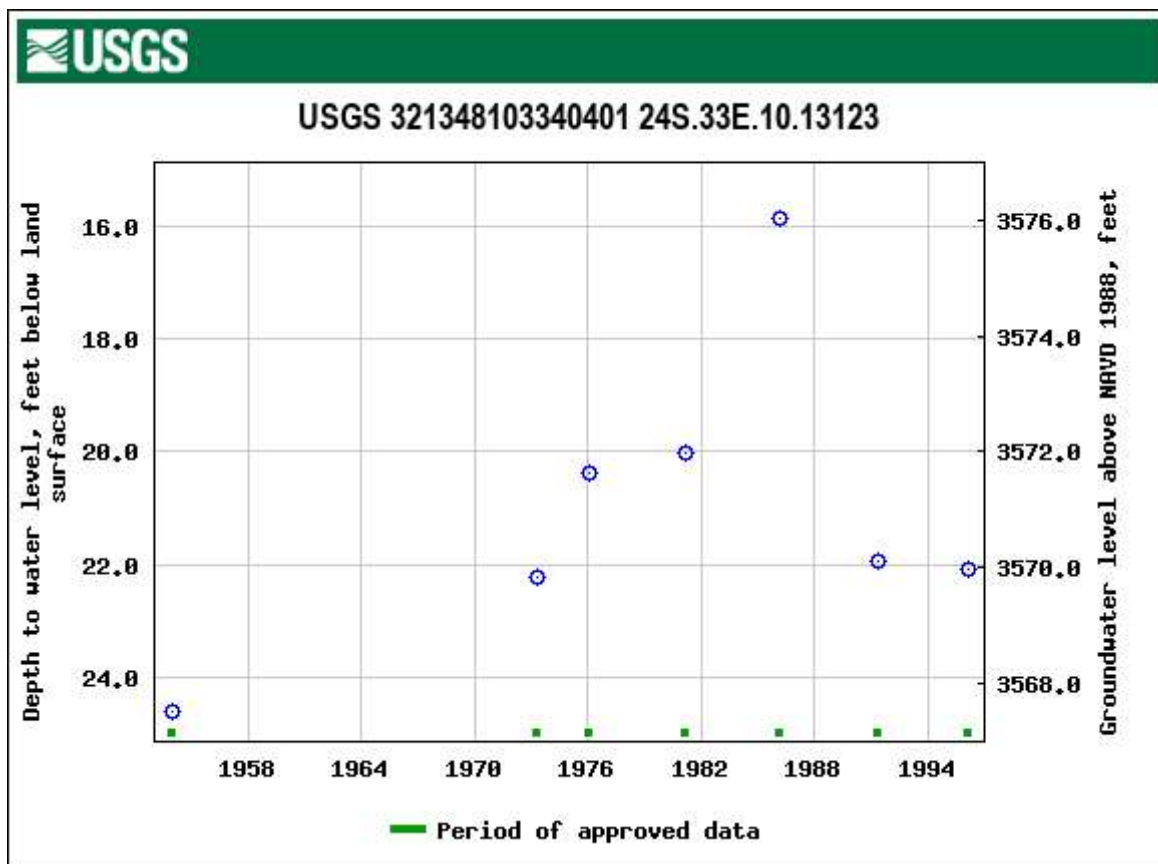
[agency_code=USGS&site_no=321348103340401](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321348103340401)



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

Page Last Modified: 2021-12-27 15:30:27 EST


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APPENDIX B

Lithologic Soil Sampling Logs

		Sample Name: BH01		Date: 02/14/2022				
		Site Name: Macho Nacho 002H						
		Incident Number: NAPP2200644754						
		Job Number: 03D2024015						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: PB		Method: Hand Auger			
			Hole Diameter: 4"		Total Depth: 1'			
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	1.7	N	BH01	0.5	0.5	SP-SM	SAND, dark brown, abundant silt, fine grain, well sorted, poorly graded, trace caliche gravel, no stain, trace odor.
D	<179.2	2.4	N	BH01A	1	1	SP-SM	SAA, more caliche gravel, less odor.
TD @ 1 foot bgs								

		Sample Name: BH02		Date: 02/14/2022				
		Site Name: Macho Nacho 002H						
		Incident Number: NAPP2200644754						
		Job Number: 03D2024015						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: PB		Method: Hand Auger			
			Hole Diameter: 4"		Total Depth: 2'			
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	2.7	N	BH02	1	1	SP-SM	SAND, dark brown, abundant silt, fine grain, well sorted, poorly graded, trace caliche gravel, no stain, no odor.
D	<179.2	0.7	N	BH02A	2	2	SP-SM	SAA
TD @ 2 feet bgs								

		Sample Name: BH03		Date: 02/14/2022				
		Site Name: Macho Nacho 002H						
		Incident Number: NAPP2200644754						
		Job Number: 03D2024015						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: PB		Method: Hand Auger			
			Hole Diameter: 4"		Total Depth: 2'			
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	2.2	N	BH03	1	1	SP-SM	SAND, dark brown, abundant silt, fine grain, well sorted, poorly graded, trace caliche gravel, no stain, no odor.
D	<179.2	2.5	N	BH03A	2	2	SP-SM	SAA
TD @ 2 feet bgs								

		Sample Name: BH04		Date: 02/14/2022				
		Site Name: Macho Nacho 002H						
		Incident Number: NAPP2200644754						
		Job Number: 03D2024015						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: PB		Method: Hand Auger			
			Hole Diameter: 4"		Total Depth: 1'			
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	1.4	N	BH04	0.5	0.5	SP-SM	SAND, dark brown, abundant silt, fine grain, well sorted, poorly graded, trace caliche gravel, no stain, trace HC odor.
D	<179.2	1.7	N	BH04A	1	1	SP-SM	SAA, more caliche gravel, less odor.
TD @ 1 foot bgs								



APPENDIX C

Photographic Log

**Photographic Log**

COG Operating, LLC

Macho Nacho 002H

Incident Number NAPP2200644754



Photograph 1

Date: February 14, 2022

Description: View of BH02 location during delineation.



Photograph 2

Date: May 25, 2022

Description: View of excavation extent.



Photograph 3

Date: May 25, 2022

Description: View of excavation extent.



Photograph 4

Date: May 25, 2022

Description: View of excavation extent.



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1987-1

Laboratory Sample Delivery Group: 31403720.000
Client Project/Site: MACHO NACHO 2H BATTERY

For:

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

Attn: Kalei Jennings

Authorized for release by:
2/28/2022 3:32:20 PM

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

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

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

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Laboratory Job ID: 890-1987-1
SDG: 31403720.000

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Definitions/Glossary

Client: WSP USA Inc.

Job ID: 890-1987-1

Project/Site: MACHO NACHO 2H BATTERY

SDG: 31403720.000

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
S1-	Surrogate recovery exceeds control 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

Eurofins Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Job ID: 890-1987-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-1987-1****Receipt**

The samples were received on 2/21/2022 11:51 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20198 and analytical batch 880-20288 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-1987-1), BH02 (890-1987-3), BH04 (890-1987-4), (890-1972-A-1-E), (890-1972-A-1-F MS) and (890-1972-A-1-G MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike duplicate (MSD) recoveries for preparation batch 880-20135 and analytical batch 880-20167 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: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH01

Lab Sample ID: 890-1987-1

Date Collected: 02/14/22 09:43

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 23:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 23:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 23:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/24/22 10:28	02/26/22 23:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 23:36	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/24/22 10:28	02/26/22 23:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	02/24/22 10:28	02/26/22 23:36	1
1,4-Difluorobenzene (Surr)	92		70 - 130	02/24/22 10:28	02/26/22 23:36	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			02/28/22 10:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	252		50.0	mg/Kg			02/23/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 18:11	1
Diesel Range Organics (Over C10-C28)	252		50.0	mg/Kg		02/22/22 09:05	02/22/22 18:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	02/22/22 09:05	02/22/22 18:11	1
o-Terphenyl	69	S1-	70 - 130	02/22/22 09:05	02/22/22 18:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.9		5.02	mg/Kg			02/24/22 22:55	1

Client Sample ID: BH01A

Lab Sample ID: 890-1987-2

Date Collected: 02/14/22 09:52

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		02/24/22 10:28	02/26/22 23:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/24/22 10:28	02/26/22 23:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/24/22 10:28	02/26/22 23:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/24/22 10:28	02/26/22 23:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/24/22 10:28	02/26/22 23:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/24/22 10:28	02/26/22 23:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	02/24/22 10:28	02/26/22 23:57	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH01A

Lab Sample ID: 890-1987-2

Date Collected: 02/14/22 09:52

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	02/24/22 10:28	02/26/22 23:57	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			02/28/22 10:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.0		49.9	mg/Kg			02/23/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/22/22 09:05	02/22/22 18:31	1
Diesel Range Organics (Over C10-C28)	54.0		49.9	mg/Kg		02/22/22 09:05	02/22/22 18:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/22/22 09:05	02/22/22 18:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130			02/22/22 09:05	02/22/22 18:31	1
o-Terphenyl	77		70 - 130			02/22/22 09:05	02/22/22 18:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.7		5.04	mg/Kg			02/24/22 23:02	1

Client Sample ID: BH02

Lab Sample ID: 890-1987-3

Date Collected: 02/14/22 10:35

Matrix: Solid

Date Received: 02/21/22 11:51

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		02/24/22 10:28	02/27/22 00:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/27/22 00:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/27/22 00:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	02/24/22 10:28	02/27/22 00:17	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/24/22 10:28	02/27/22 00:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/28/22 10:45	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			02/23/22 09:21	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH02

Lab Sample ID: 890-1987-3

Date Collected: 02/14/22 10:35

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 18:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 18:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 18:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130			02/22/22 09:05	02/22/22 18:52	1
o-Terphenyl	70		70 - 130			02/22/22 09:05	02/22/22 18:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.39		4.98	mg/Kg			02/24/22 23:21	1

Client Sample ID: BH04

Lab Sample ID: 890-1987-4

Date Collected: 02/14/22 10:02

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/27/22 00:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130			02/24/22 10:28	02/27/22 00:38	1
1,4-Difluorobenzene (Surr)	95		70 - 130			02/24/22 10:28	02/27/22 00:38	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			02/28/22 10:45	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			02/23/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 19:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 19:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 19:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			02/22/22 09:05	02/22/22 19:11	1
o-Terphenyl	74		70 - 130			02/22/22 09:05	02/22/22 19:11	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH04

Lab Sample ID: 890-1987-4

Date Collected: 02/14/22 10:02

Matrix: Solid

Date Received: 02/21/22 11:51

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			02/24/22 23:27	1

Client Sample ID: BH04A

Lab Sample ID: 890-1987-5

Date Collected: 02/14/22 10:15

Matrix: Solid

Date Received: 02/21/22 11:51

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		02/24/22 10:28	02/27/22 00:58	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/24/22 10:28	02/27/22 00:58	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/24/22 10:28	02/27/22 00:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/24/22 10:28	02/27/22 00:58	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/24/22 10:28	02/27/22 00:58	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/24/22 10:28	02/27/22 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			02/24/22 10:28	02/27/22 00:58	1
1,4-Difluorobenzene (Surr)	97		70 - 130			02/24/22 10:28	02/27/22 00:58	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			02/28/22 10:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.4		49.9	mg/Kg			02/23/22 09:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/22/22 09:05	02/22/22 19:31	1
Diesel Range Organics (Over C10-C28)	51.4		49.9	mg/Kg		02/22/22 09:05	02/22/22 19:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/22/22 09:05	02/22/22 19:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			02/22/22 09:05	02/22/22 19:31	1
o-Terphenyl	89		70 - 130			02/22/22 09:05	02/22/22 19:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.8		5.00	mg/Kg			02/24/22 23:34	1

Eurofins Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

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)
880-11501-A-1-C MS	Matrix Spike	104	98
880-11501-A-1-D MSD	Matrix Spike Duplicate	108	100
890-1987-1	BH01	107	92
890-1987-2	BH01A	91	100
890-1987-3	BH02	108	93
890-1987-4	BH04	112	95
890-1987-5	BH04A	92	97
LCS 880-20198/1-A	Lab Control Sample	104	103
LCSD 880-20198/2-A	Lab Control Sample Dup	102	102
MB 880-20197/5-A	Method Blank	95	98
MB 880-20198/5-A	Method Blank	97	96
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1972-A-1-F MS	Matrix Spike	70	60 S1-
890-1972-A-1-G MSD	Matrix Spike Duplicate	72	61 S1-
890-1987-1	BH01	65 S1-	69 S1-
890-1987-2	BH01A	70	77
890-1987-3	BH02	64 S1-	70
890-1987-4	BH04	68 S1-	74
890-1987-5	BH04A	76	89
LCS 880-20026/2-A	Lab Control Sample	101	106
LCSD 880-20026/3-A	Lab Control Sample Dup	100	106
MB 880-20026/1-A	Method Blank	75	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20197/5-A

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20197

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:24	02/25/22 23:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:24	02/25/22 23:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:24	02/25/22 23:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 10:24	02/25/22 23:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:24	02/25/22 23:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 10:24	02/25/22 23:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	02/24/22 10:24	02/25/22 23:18	1
1,4-Difluorobenzene (Surr)	98		70 - 130	02/24/22 10:24	02/25/22 23:18	1

Lab Sample ID: MB 880-20198/5-A

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20198

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 17:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 17:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 17:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/26/22 17:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 10:28	02/26/22 17:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 10:28	02/26/22 17:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	02/24/22 10:28	02/26/22 17:30	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/24/22 10:28	02/26/22 17:30	1

Lab Sample ID: LCS 880-20198/1-A

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09909		mg/Kg		99	70 - 130
Toluene	0.100	0.09438		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09155		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.2087		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1037		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-20198/2-A

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08953		mg/Kg		90	70 - 130	10	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

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

Lab Sample ID: LCSD 880-20198/2-A

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.08354		mg/Kg		84	70 - 130	12	35
Ethylbenzene	0.100	0.08194		mg/Kg		82	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1894		mg/Kg		95	70 - 130	10	35
o-Xylene	0.100	0.09718		mg/Kg		97	70 - 130	6	35

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

Lab Sample ID: 880-11501-A-1-C MS

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U F1 F2	0.101	0.07725		mg/Kg		77	70 - 130
Toluene	<0.00202	U F1 F2	0.101	0.07728		mg/Kg		76	70 - 130
Ethylbenzene	<0.00202	U F1 F2	0.101	0.07397		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00404	U F1 F2	0.201	0.1703		mg/Kg		84	70 - 130
o-Xylene	<0.00202	U F1	0.101	0.08428		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-11501-A-1-D MSD

Matrix: Solid

Analysis Batch: 20288

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0996	0.05140	F1 F2	mg/Kg		52	70 - 130	40	35
Toluene	<0.00202	U F1 F2	0.0996	0.04948	F1 F2	mg/Kg		49	70 - 130	44	35
Ethylbenzene	<0.00202	U F1 F2	0.0996	0.04974	F1 F2	mg/Kg		49	70 - 130	39	35
m-Xylene & p-Xylene	<0.00404	U F1 F2	0.199	0.1148	F1 F2	mg/Kg		57	70 - 130	39	35
o-Xylene	<0.00202	U F1	0.0996	0.05988	F1	mg/Kg		60	70 - 130	34	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-20026/1-A

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20026

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		02/22/22 09:05	02/22/22 11:45	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

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

Lab Sample ID: MB 880-20026/1-A

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20026

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		02/22/22 09:05	02/22/22 11:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 11:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			02/22/22 09:05	02/22/22 11:45	1
o-Terphenyl	91		70 - 130			02/22/22 09:05	02/22/22 11:45	1

Lab Sample ID: LCS 880-20026/2-A

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20026

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	849.9		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1050		mg/Kg		105	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	106		70 - 130				

Lab Sample ID: LCSD 880-20026/3-A

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20026

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	802.5		mg/Kg		80	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	986.2		mg/Kg		99	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 890-1972-A-1-F MS

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20026

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1225		mg/Kg		123	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1240		mg/Kg		122	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	70		70 - 130						
o-Terphenyl	60	S1-	70 - 130						

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QC Sample Results

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

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

Lab Sample ID: 890-1972-A-1-G MSD

Matrix: Solid

Analysis Batch: 20030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20026

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1256		mg/Kg		126	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1271		mg/Kg		126	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	72		70 - 130								
o-Terphenyl	61	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20135/1-A

Matrix: Solid

Analysis Batch: 20167

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			02/24/22 22:05	1

Lab Sample ID: LCS 880-20135/2-A

Matrix: Solid

Analysis Batch: 20167

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.6		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-20135/3-A

Matrix: Solid

Analysis Batch: 20167

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	262.2		mg/Kg		105	90 - 110	5	20

Lab Sample ID: 890-1986-A-2-C MS

Matrix: Solid

Analysis Batch: 20167

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	132	F1	249	388.4		mg/Kg		103	90 - 110

Lab Sample ID: 890-1986-A-2-D MSD

Matrix: Solid

Analysis Batch: 20167

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	132	F1	249	318.8	F1	mg/Kg		75	90 - 110	20	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

GC VOA

Prep Batch: 20197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20197/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 20198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	5035	
890-1987-2	BH01A	Total/NA	Solid	5035	
890-1987-3	BH02	Total/NA	Solid	5035	
890-1987-4	BH04	Total/NA	Solid	5035	
890-1987-5	BH04A	Total/NA	Solid	5035	
MB 880-20198/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20198/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20198/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11501-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-11501-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	8021B	20198
890-1987-2	BH01A	Total/NA	Solid	8021B	20198
890-1987-3	BH02	Total/NA	Solid	8021B	20198
890-1987-4	BH04	Total/NA	Solid	8021B	20198
890-1987-5	BH04A	Total/NA	Solid	8021B	20198
MB 880-20197/5-A	Method Blank	Total/NA	Solid	8021B	20197
MB 880-20198/5-A	Method Blank	Total/NA	Solid	8021B	20198
LCS 880-20198/1-A	Lab Control Sample	Total/NA	Solid	8021B	20198
LCSD 880-20198/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20198
880-11501-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	20198
880-11501-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20198

Analysis Batch: 20469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	Total BTEX	
890-1987-2	BH01A	Total/NA	Solid	Total BTEX	
890-1987-3	BH02	Total/NA	Solid	Total BTEX	
890-1987-4	BH04	Total/NA	Solid	Total BTEX	
890-1987-5	BH04A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	8015NM Prep	
890-1987-2	BH01A	Total/NA	Solid	8015NM Prep	
890-1987-3	BH02	Total/NA	Solid	8015NM Prep	
890-1987-4	BH04	Total/NA	Solid	8015NM Prep	
890-1987-5	BH04A	Total/NA	Solid	8015NM Prep	
MB 880-20026/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20026/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1972-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1972-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

GC Semi VOA

Analysis Batch: 20030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	8015B NM	20026
890-1987-2	BH01A	Total/NA	Solid	8015B NM	20026
890-1987-3	BH02	Total/NA	Solid	8015B NM	20026
890-1987-4	BH04	Total/NA	Solid	8015B NM	20026
890-1987-5	BH04A	Total/NA	Solid	8015B NM	20026
MB 880-20026/1-A	Method Blank	Total/NA	Solid	8015B NM	20026
LCS 880-20026/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20026
LCSD 880-20026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20026
890-1972-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	20026
890-1972-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20026

Analysis Batch: 20126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Total/NA	Solid	8015 NM	
890-1987-2	BH01A	Total/NA	Solid	8015 NM	
890-1987-3	BH02	Total/NA	Solid	8015 NM	
890-1987-4	BH04	Total/NA	Solid	8015 NM	
890-1987-5	BH04A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Soluble	Solid	DI Leach	
890-1987-2	BH01A	Soluble	Solid	DI Leach	
890-1987-3	BH02	Soluble	Solid	DI Leach	
890-1987-4	BH04	Soluble	Solid	DI Leach	
890-1987-5	BH04A	Soluble	Solid	DI Leach	
MB 880-20135/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20135/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20135/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1986-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1986-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1987-1	BH01	Soluble	Solid	300.0	20135
890-1987-2	BH01A	Soluble	Solid	300.0	20135
890-1987-3	BH02	Soluble	Solid	300.0	20135
890-1987-4	BH04	Soluble	Solid	300.0	20135
890-1987-5	BH04A	Soluble	Solid	300.0	20135
MB 880-20135/1-A	Method Blank	Soluble	Solid	300.0	20135
LCS 880-20135/2-A	Lab Control Sample	Soluble	Solid	300.0	20135
LCSD 880-20135/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20135
890-1986-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	20135
890-1986-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20135

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH01

Lab Sample ID: 890-1987-1

Date Collected: 02/14/22 09:43

Matrix: Solid

Date Received: 02/21/22 11:51

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	20198	02/24/22 10:28	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20288	02/26/22 23:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20469	02/28/22 10:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20126	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20030	02/22/22 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	20135	02/23/22 10:11	CH	XEN MID
Soluble	Analysis	300.0		1			20167	02/24/22 22:55	SC	XEN MID

Client Sample ID: BH01A

Lab Sample ID: 890-1987-2

Date Collected: 02/14/22 09:52

Matrix: Solid

Date Received: 02/21/22 11:51

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	20198	02/24/22 10:28	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20288	02/26/22 23:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20469	02/28/22 10:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20126	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20030	02/22/22 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	20135	02/23/22 10:11	CH	XEN MID
Soluble	Analysis	300.0		1			20167	02/24/22 23:02	SC	XEN MID

Client Sample ID: BH02

Lab Sample ID: 890-1987-3

Date Collected: 02/14/22 10:35

Matrix: Solid

Date Received: 02/21/22 11:51

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	20198	02/24/22 10:28	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20288	02/27/22 00:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20469	02/28/22 10:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20126	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20030	02/22/22 18:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20135	02/23/22 10:11	CH	XEN MID
Soluble	Analysis	300.0		1			20167	02/24/22 23:21	SC	XEN MID

Client Sample ID: BH04

Lab Sample ID: 890-1987-4

Date Collected: 02/14/22 10:02

Matrix: Solid

Date Received: 02/21/22 11:51

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	20198	02/24/22 10:28	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20288	02/27/22 00:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20469	02/28/22 10:45	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Client Sample ID: BH04

Lab Sample ID: 890-1987-4

Date Collected: 02/14/22 10:02

Matrix: Solid

Date Received: 02/21/22 11:51

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			20126	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20030	02/22/22 19:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20135	02/23/22 10:11	CH	XEN MID
Soluble	Analysis	300.0		1			20167	02/24/22 23:27	SC	XEN MID

Client Sample ID: BH04A

Lab Sample ID: 890-1987-5

Date Collected: 02/14/22 10:15

Matrix: Solid

Date Received: 02/21/22 11:51

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	20198	02/24/22 10:28	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20288	02/27/22 00:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20469	02/28/22 10:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20126	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20030	02/22/22 19:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20135	02/23/22 10:11	CH	XEN MID
Soluble	Analysis	300.0		1			20167	02/24/22 23:34	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: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

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.

Job ID: 890-1987-1

Project/Site: MACHO NACHO 2H BATTERY

SDG: 31403720.000

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: MACHO NACHO 2H BATTERY

Job ID: 890-1987-1
SDG: 31403720.000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1987-1	BH01	Solid	02/14/22 09:43	02/21/22 11:51	0.5
890-1987-2	BH01A	Solid	02/14/22 09:52	02/21/22 11:51	1
890-1987-3	BH02	Solid	02/14/22 10:35	02/21/22 11:51	1
890-1987-4	BH04	Solid	02/14/22 10:02	02/21/22 11:51	0.5
890-1987-5	BH04A	Solid	02/14/22 10:15	02/21/22 11:51	1



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) 382-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8600 Tampa, FL (813) 233-3333

Work Order No: _____

Page ____ of ____

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Chain of Custody

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

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

Project Name:	Macho Nacho 2H Battery	Turn Around	ANALYSIS REQUEST							Work Order Notes
Project Number:	31403720.00	Routine <input type="checkbox"/>								
P.O. Number:		Rush:								
Sampler's Name:	Payton Benner	Due Date:								

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	2.0/1.8	Thermometer ID					
Received Intact:	Yes No	T-NA - 00					
Cooler Custody Seals:	Yes No N/A	Correction Factor: -0.2					
Sample Custody Seals:	Yes No N/A	Total Containers:					

Number of Containers

PA 8015)

EPA 0=8021)

e (EPA 300.0)

890-1987 Chain-of-Custody

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

[illegible]

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 :Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	2/21/22 11:51			

Downloaded from ASX418.DWG on 08/21/2025

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1987-1

SDG Number: 31403720.000

Login Number: 1987

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1987-1

SDG Number: 31403720.000

Login Number: 1987

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 02/22/22 02:59 PM

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

Laboratory Job ID: 890-2135-1

Laboratory Sample Delivery Group: 31403720.000 t5ask 26.02

Client Project/Site: Macho Nacho 2H 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:
4/8/2022 10:07:36 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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

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

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Laboratory Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Job ID: 890-2135-1

Laboratory: Eurofins Carlsbad**Narrative**

**Job Narrative
890-2135-1****Receipt**

The samples were received on 3/24/2022 9:23 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS01

Lab Sample ID: 890-2135-1

Date Collected: 03/23/22 11:40

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/26/22 15:07	1
Toluene	0.0147		0.00202	mg/Kg		03/25/22 11:00	03/26/22 15:07	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/25/22 11:00	03/26/22 15:07	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/25/22 11:00	03/26/22 15:07	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/25/22 11:00	03/26/22 15:07	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/25/22 11:00	03/26/22 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	03/25/22 11:00	03/26/22 15:07	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/25/22 11:00	03/26/22 15:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0147		0.00404	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			03/28/22 10:07	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		03/25/22 10:30	03/25/22 12:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/25/22 10:30	03/25/22 12:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/25/22 10:30	03/25/22 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	03/25/22 10:30	03/25/22 12:35	1
o-Terphenyl	102		70 - 130	03/25/22 10:30	03/25/22 12:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.6		4.96	mg/Kg			04/07/22 13:29	1

Client Sample ID: FS04

Lab Sample ID: 890-2135-2

Date Collected: 03/23/22 11:46

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/26/22 15:27	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/26/22 15:27	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/26/22 15:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/26/22 15:27	1
o-Xylene	0.00358		0.00199	mg/Kg		03/25/22 11:00	03/26/22 15:27	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/26/22 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	03/25/22 11:00	03/26/22 15:27	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS04

Lab Sample ID: 890-2135-2

Date Collected: 03/23/22 11:46

Matrix: Solid

Date Received: 03/24/22 09:23

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130	03/25/22 11:00	03/26/22 15:27	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	<49.9	U	49.9	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 13:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/25/22 10:30	03/25/22 13:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/25/22 10:30	03/25/22 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/25/22 10:30	03/25/22 13:37	1
o-Terphenyl	103		70 - 130			03/25/22 10:30	03/25/22 13:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.9		5.00	mg/Kg			04/07/22 13:47	1

Client Sample ID: FS05

Lab Sample ID: 890-2135-3

Date Collected: 03/23/22 11:48

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/26/22 15:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 11:00	03/26/22 15:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 11:00	03/26/22 15:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 11:00	03/26/22 15:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 11:00	03/26/22 15:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 11:00	03/26/22 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	03/25/22 11:00	03/26/22 15:48	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/25/22 11:00	03/26/22 15:48	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	<49.8	U	49.8	mg/Kg			03/28/22 10:07	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS05

Lab Sample ID: 890-2135-3

Date Collected: 03/23/22 11:48

Matrix: Solid

Date Received: 03/24/22 09:23

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/25/22 10:30	03/25/22 13:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/25/22 10:30	03/25/22 13:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/25/22 10:30	03/25/22 13:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/25/22 10:30	03/25/22 13:58	1
o-Terphenyl	97		70 - 130			03/25/22 10:30	03/25/22 13:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			04/07/22 13:53	1

Client Sample ID: FS06

Lab Sample ID: 890-2135-4

Date Collected: 03/23/22 11:50

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/26/22 16:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/26/22 16:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/26/22 16:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/26/22 16:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/26/22 16:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/26/22 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			03/25/22 11:00	03/26/22 16:09	1
1,4-Difluorobenzene (Surr)	110		70 - 130			03/25/22 11:00	03/26/22 16:09	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	93.6		49.7	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 14:18	1
Diesel Range Organics (Over C10-C28)	93.6		49.7	mg/Kg		03/25/22 10:30	03/25/22 14:18	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		03/25/22 10:30	03/25/22 14:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/25/22 10:30	03/25/22 14:18	1
o-Terphenyl	102		70 - 130			03/25/22 10:30	03/25/22 14:18	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS06

Lab Sample ID: 890-2135-4

Date Collected: 03/23/22 11:50

Matrix: Solid

Date Received: 03/24/22 09:23

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.62		4.99	mg/Kg			04/07/22 13:59	1

Client Sample ID: FS09

Lab Sample ID: 890-2135-5

Date Collected: 03/23/22 11:56

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/26/22 16:29	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/25/22 11:00	03/26/22 16:29	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/25/22 11:00	03/26/22 16:29	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/25/22 11:00	03/26/22 16:29	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/25/22 11:00	03/26/22 16:29	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/25/22 11:00	03/26/22 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			03/25/22 11:00	03/26/22 16:29	1
1,4-Difluorobenzene (Surr)	100		70 - 130			03/25/22 11:00	03/26/22 16:29	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	<50.0	U	50.0	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 14:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 14:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/25/22 10:30	03/25/22 14:39	1
o-Terphenyl	119		70 - 130			03/25/22 10:30	03/25/22 14:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04	mg/Kg			04/07/22 14:05	1

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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)
890-2135-1	FS01	124	105
890-2135-2	FS04	112	112
890-2135-3	FS05	113	106
890-2135-4	FS06	108	110
890-2135-5	FS09	107	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2135-1	FS01	89	102
890-2135-1 MS	FS01	84	86
890-2135-1 MSD	FS01	87	93
890-2135-2	FS04	92	103
890-2135-3	FS05	89	97
890-2135-4	FS06	92	102
890-2135-5	FS09	105	119
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-22336/2-A	Lab Control Sample	100	119
LCSD 880-22336/3-A	Lab Control Sample Dup	98	117
MB 880-22336/1-A	Method Blank	93	113
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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

Lab Sample ID: MB 880-22336/1-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22336

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		03/25/22 10:30	03/25/22 11:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 11:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 11:33	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			03/25/22 10:30	03/25/22 11:33	1
o-Terphenyl	113		70 - 130			03/25/22 10:30	03/25/22 11:33	1

Lab Sample ID: LCS 880-22336/2-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1020		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	862.6		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	100		70 - 130				
o-Terphenyl	119		70 - 130				

Lab Sample ID: LCSD 880-22336/3-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22336

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1037		mg/Kg		104	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	892.3		mg/Kg		89	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	117		70 - 130						

Lab Sample ID: 890-2135-1 MS

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 22336

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	819.4		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	744.8		mg/Kg		70	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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

Lab Sample ID: 890-2135-1 MS

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 22336

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-2135-1 MSD

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 22336

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	845.1		mg/Kg		85	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	800.3		mg/Kg		76	70 - 130	7	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	93		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22993/1-A

Matrix: Solid

Analysis Batch: 23129

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			04/07/22 13:12	1

Lab Sample ID: LCS 880-22993/2-A

Matrix: Solid

Analysis Batch: 23129

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-22993/3-A

Matrix: Solid

Analysis Batch: 23129

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2135-1 MS

Matrix: Solid

Analysis Batch: 23129

Client Sample ID: FS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	59.6		248	300.1		mg/Kg		97	90 - 110

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2135-1 MSD							Client Sample ID: FS01					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 23129												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	59.6		248	310.6		mg/Kg		101	90 - 110	3	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

GC VOA

Prep Batch: 22245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	5035	
890-2135-2	FS04	Total/NA	Solid	5035	
890-2135-3	FS05	Total/NA	Solid	5035	
890-2135-4	FS06	Total/NA	Solid	5035	
890-2135-5	FS09	Total/NA	Solid	5035	

Analysis Batch: 22323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	8021B	22245
890-2135-2	FS04	Total/NA	Solid	8021B	22245
890-2135-3	FS05	Total/NA	Solid	8021B	22245
890-2135-4	FS06	Total/NA	Solid	8021B	22245
890-2135-5	FS09	Total/NA	Solid	8021B	22245

Analysis Batch: 22489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	Total BTEX	
890-2135-2	FS04	Total/NA	Solid	Total BTEX	
890-2135-3	FS05	Total/NA	Solid	Total BTEX	
890-2135-4	FS06	Total/NA	Solid	Total BTEX	
890-2135-5	FS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	8015B NM	22336
890-2135-2	FS04	Total/NA	Solid	8015B NM	22336
890-2135-3	FS05	Total/NA	Solid	8015B NM	22336
890-2135-4	FS06	Total/NA	Solid	8015B NM	22336
890-2135-5	FS09	Total/NA	Solid	8015B NM	22336
MB 880-22336/1-A	Method Blank	Total/NA	Solid	8015B NM	22336
LCS 880-22336/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22336
LCSD 880-22336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22336
890-2135-1 MS	FS01	Total/NA	Solid	8015B NM	22336
890-2135-1 MSD	FS01	Total/NA	Solid	8015B NM	22336

Prep Batch: 22336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	8015NM Prep	
890-2135-2	FS04	Total/NA	Solid	8015NM Prep	
890-2135-3	FS05	Total/NA	Solid	8015NM Prep	
890-2135-4	FS06	Total/NA	Solid	8015NM Prep	
890-2135-5	FS09	Total/NA	Solid	8015NM Prep	
MB 880-22336/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22336/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2135-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-2135-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

GC Semi VOA

Analysis Batch: 22457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Total/NA	Solid	8015 NM	
890-2135-2	FS04	Total/NA	Solid	8015 NM	
890-2135-3	FS05	Total/NA	Solid	8015 NM	
890-2135-4	FS06	Total/NA	Solid	8015 NM	
890-2135-5	FS09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 22993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Soluble	Solid	DI Leach	
890-2135-2	FS04	Soluble	Solid	DI Leach	
890-2135-3	FS05	Soluble	Solid	DI Leach	
890-2135-4	FS06	Soluble	Solid	DI Leach	
890-2135-5	FS09	Soluble	Solid	DI Leach	
MB 880-22993/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2135-1 MS	FS01	Soluble	Solid	DI Leach	
890-2135-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 23129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2135-1	FS01	Soluble	Solid	300.0	22993
890-2135-2	FS04	Soluble	Solid	300.0	22993
890-2135-3	FS05	Soluble	Solid	300.0	22993
890-2135-4	FS06	Soluble	Solid	300.0	22993
890-2135-5	FS09	Soluble	Solid	300.0	22993
MB 880-22993/1-A	Method Blank	Soluble	Solid	300.0	22993
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	300.0	22993
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22993
890-2135-1 MS	FS01	Soluble	Solid	300.0	22993
890-2135-1 MSD	FS01	Soluble	Solid	300.0	22993

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS01

Lab Sample ID: 890-2135-1

Date Collected: 03/23/22 11:40

Matrix: Solid

Date Received: 03/24/22 09:23

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	22245	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 15:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22489	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22457	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 12:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 13:29	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-2135-2

Date Collected: 03/23/22 11:46

Matrix: Solid

Date Received: 03/24/22 09:23

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	22245	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 15:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22489	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22457	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 13:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 13:47	CH	XEN MID

Client Sample ID: FS05

Lab Sample ID: 890-2135-3

Date Collected: 03/23/22 11:48

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 15:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22489	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22457	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 13:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 13:53	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-2135-4

Date Collected: 03/23/22 11:50

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 16:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22489	03/28/22 12:44	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Client Sample ID: FS06

Date Collected: 03/23/22 11:50

Date Received: 03/24/22 09:23

Lab Sample ID: 890-2135-4

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			22457	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 14:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 13:59	CH	XEN MID

Client Sample ID: FS09

Date Collected: 03/23/22 11:56

Date Received: 03/24/22 09:23

Lab Sample ID: 890-2135-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	22245	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 16:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22489	03/28/22 12:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22457	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 14:39	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 14:05	CH	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: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2135-1
SDG: 31403720.000 t5ask 26.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2135-1	FS01	Solid	03/23/22 11:40	03/24/22 09:23	1
890-2135-2	FS04	Solid	03/23/22 11:46	03/24/22 09:23	1
890-2135-3	FS05	Solid	03/23/22 11:48	03/24/22 09:23	1
890-2135-4	FS06	Solid	03/23/22 11:50	03/24/22 09:23	1
890-2135-5	FS09	Solid	03/23/22 11:56	03/24/22 09:23	1

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

Chain of Custody

Work Order No: _____

Project Manager:	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

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

Project Name:	Macho Nacho 2H Battery	Turn Around	ANALYSIS REQUEST																Work Order Notes					
Project Number:	31403720.000 Task 26.02	Routine																						
P.O. Number:		Rush:																						
Sampler's Name:	Payton Benner	Due Date:																						
SAMPLE RECEIPT		Temp Blank:	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Well Ice:	<input checked="" type="radio"/> Yes	<input type="radio"/> No																	
Temperature (°C):	3.4/3.2	Thermometer ID	TMM-003																					
Received Intact:	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Correction Factor: -0.2																					
Cooler Custody Seals:	Yes	No	Total Containers:																					
Sample Custody Seals:	Yes	No																						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number of Containers																		
FS01	S		03/23/22	11:40	1	1	X	X	X	X											COMPOSITE			
FS04	S		03/23/22	11:46	1	1	X	X	X	X											COMPOSITE			
FS05	S		03/23/22	11:48	1	1	X	X	X	X											COMPOSITE			
FS06	S		03/23/22	11:50	1	1	X	X	X	X											COMPOSITE			
FS09	S		03/23/22	11:56	1	1	X	X	X	X											COMPOSITE			
																		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
<i>[Signature]</i>	<i>[Signature]</i>	3-24-22 0903			



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

Chain of Custody Record

Client Information (Sub Contract Lab)				Sampler		Lab PM		Carrier Tracking No(s)		COC No:	
Client Contact:				Phone:		Kramer, Jessica				890-686-1	
Shipping/Receiving				E-Mail		jessica.kramer@eurofinst.com		State of Origin:		Page 1 of 1	
Eurofins Environment Testing South Central				Accreditations Required (See note):		NELAP - Louisiana, NELAP - Texas		Job #:		890-2135-1	
Address:				Due Date Requested		3/30/2022		TAT Requested (days):		Preservation Codes	
City:				Midland						A - HCL	
State, Zip:				TX, 79701						B - NaOH	
Phone:				432-704-5440(Tel)						C - Zn Acetate	
Email:				432-704-5440(Tel)						D - Nitric Acid	
Project Name:				Machno Machno 2H Battery						E - NaHSO4	
Site:				SSOW#:						F - MeOH	
Project #:				89000048						G - Amthor	
Sample Identification - Client ID (Lab ID)				Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=soil, B=Trieste, A=Air)	
FS01 (890-2135-1)				3/23/22		11 40		Solid		Field Filtered Sample (Yes or No)	
FS04 (890-2135-2)				3/23/22		11 46		Solid		Perform MS/MSD (Yes or No)	
FS05 (890-2135-3)				3/23/22		11 48		Solid		8016MOD_NM/8016NM_S_Prep Full TPH	
FS06 (890-2135-4)				3/23/22		11 50		Solid		300_ORGFM_28D/DI_LEACH Chloride	
FS08 (890-2135-5)				3/23/22		11 56		Solid		8021B/5035FP_Calc BTEX	
										Total_BTEX_GCV	
										8016MOD_Calc	
										Total Number of containers	
										Special Instructions/Note:	
										A - HCL	
										B - NaOH	
										C - Zn Acetate	
										D - Nitric Acid	
										E - NaHSO4	
										F - MeOH	
										G - Amthor	
										H - Ascorbic Acid	
										I - Ice	
										J - DI Water	
										K - EDTA	
										L - EDTA	
										M - Hexane	
										N - None	
										O - AsnO2	
										P - Na2OAS	
										Q - Na2SO3	
										R - Na2S2O3	
										S - H2SO4	
										T - TSP Dodecalhydrate	
										U - Acetone	
										V - MCAA	
										W - pH 4-5	
										Z - other (specify)	
										Other:	
										Preservation Codes	
										A - HCL	
										B - NaOH	
										C - Zn Acetate	
										D - Nitric Acid	
										E - NaHSO4	
										F - MeOH	
										G - Amthor	
										H - Ascorbic Acid	
										I - Ice	
										J - DI Water	
										K - EDTA	
										L - EDTA	
										M - Hexane	
										N - None	
										O - AsnO2	
										P - Na2OAS	
										Q - Na2SO3	
										R - Na2S2O3	
										S - H2SO4	
										T - TSP Dodecalhydrate	
										U - Acetone	
										V - MCAA	
										W - pH 4-5	
										Z - other (specify)	
										Other:	
										Preservation Codes	
										A - HCL	
										B - NaOH	
										C - Zn Acetate	
										D - Nitric Acid	
										E - NaHSO4	
										F - MeOH	
										G - Am	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2135-1

SDG Number: 31403720.000 t5ask 26.02

Login Number: 2135

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2135-1

SDG Number: 31403720.000 t5ask 26.02

Login Number: 2135

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/25/22 10:25 AM

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

Laboratory Job ID: 890-2136-1

Laboratory Sample Delivery Group: 31403720.000 task 26.02
Client Project/Site: Macho Nacho 2H 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:
4/8/2022 10:07:38 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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results through

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

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

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Laboratory Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Job ID: 890-2136-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-2136-1****Comments**

No additional comments.

Receipt

The samples were received on 3/24/2022 9:23 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22266 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.

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 analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS02

Lab Sample ID: 890-2136-1

Date Collected: 03/23/22 11:42

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/25/22 15:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/25/22 15:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/25/22 15:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/25/22 15:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/25/22 11:00	03/25/22 15:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/25/22 11:00	03/25/22 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 11:00	03/25/22 15:31	1
1,4-Difluorobenzene (Surr)	111		70 - 130	03/25/22 11:00	03/25/22 15:31	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			03/25/22 16:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	91.3		49.9	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 15:00	1
Diesel Range Organics (Over C10-C28)	91.3		49.9	mg/Kg		03/25/22 10:30	03/25/22 15:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/25/22 10:30	03/25/22 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	03/25/22 10:30	03/25/22 15:00	1
o-Terphenyl	104		70 - 130	03/25/22 10:30	03/25/22 15:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.4		4.98	mg/Kg			04/07/22 14:22	1

Client Sample ID: FS03

Lab Sample ID: 890-2136-2

Date Collected: 03/23/22 11:44

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/25/22 15:51	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/25/22 11:00	03/25/22 15:51	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/25/22 11:00	03/25/22 15:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/25/22 11:00	03/25/22 15:51	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/25/22 11:00	03/25/22 15:51	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/25/22 11:00	03/25/22 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/25/22 11:00	03/25/22 15:51	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS03

Lab Sample ID: 890-2136-2

Date Collected: 03/23/22 11:44

Matrix: Solid

Date Received: 03/24/22 09:23

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	03/25/22 11:00	03/25/22 15:51	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			03/25/22 16:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	109		50.0	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 15:20	1
Diesel Range Organics (Over C10-C28)	109		50.0	mg/Kg		03/25/22 10:30	03/25/22 15:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 15:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			03/25/22 10:30	03/25/22 15:20	1
o-Terphenyl	107		70 - 130			03/25/22 10:30	03/25/22 15:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.2		4.95	mg/Kg			04/07/22 14:29	1

Client Sample ID: FS07

Lab Sample ID: 890-2136-3

Date Collected: 03/23/22 11:52

Matrix: Solid

Date Received: 03/24/22 09:23

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 11:00	03/25/22 16:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 11:00	03/25/22 16:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 11:00	03/25/22 16:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 11:00	03/25/22 16:12	1
o-Xylene	0.0381		0.00200	mg/Kg		03/25/22 11:00	03/25/22 16:12	1
Xylenes, Total	0.0381		0.00400	mg/Kg		03/25/22 11:00	03/25/22 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	03/25/22 11:00	03/25/22 16:12	1
1,4-Difluorobenzene (Surr)	99		70 - 130	03/25/22 11:00	03/25/22 16:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0381		0.00400	mg/Kg			03/25/22 16:10	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			03/28/22 10:07	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS07

Lab Sample ID: 890-2136-3

Date Collected: 03/23/22 11:52

Matrix: Solid

Date Received: 03/24/22 09:23

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 15:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 15:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 15:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			03/25/22 10:30	03/25/22 15:42	1
o-Terphenyl	107		70 - 130			03/25/22 10:30	03/25/22 15:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.88		5.00	mg/Kg			04/07/22 16:43	1

Client Sample ID: FS08

Lab Sample ID: 890-2136-4

Date Collected: 03/23/22 11:54

Matrix: Solid

Date Received: 03/24/22 09:23

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 21:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 21:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 21:18	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 21:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 14:00	03/27/22 21:18	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/25/22 14:00	03/27/22 21:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			03/25/22 14:00	03/27/22 21:18	1
1,4-Difluorobenzene (Surr)	111		70 - 130			03/25/22 14:00	03/27/22 21:18	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			03/25/22 16:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.9		50.0	mg/Kg			03/28/22 10:07	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		03/25/22 10:30	03/25/22 16:02	1
Diesel Range Organics (Over C10-C28)	71.9		50.0	mg/Kg		03/25/22 10:30	03/25/22 16:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			03/25/22 10:30	03/25/22 16:02	1
o-Terphenyl	97		70 - 130			03/25/22 10:30	03/25/22 16:02	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS08
Date Collected: 03/23/22 11:54
Date Received: 03/24/22 09:23
Sample Depth: 1

Lab Sample ID: 890-2136-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	8.51		4.99	mg/Kg			04/07/22 16:49	1	

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
890-2122-A-1-E MS	Matrix Spike	108	104				
890-2122-A-1-F MSD	Matrix Spike Duplicate	107	111				
890-2130-A-1-C MS	Matrix Spike	103	96				
890-2130-A-1-D MSD	Matrix Spike Duplicate	103	102				
890-2136-1	FS02	108	111				
890-2136-2	FS03	108	110				
890-2136-3	FS07	112	99				
890-2136-4	FS08	109	111				
LCS 880-22243/1-A	Lab Control Sample	103	112				
LCS 880-22266/1-A	Lab Control Sample	103	111				
LCSD 880-22243/2-A	Lab Control Sample Dup	103	113				
LCSD 880-22266/2-A	Lab Control Sample Dup	105	112				
MB 880-22243/5-A	Method Blank	100	102				
MB 880-22266/5-A	Method Blank	100	104				
MB 880-22286/5-A	Method Blank	101	103				
Surrogate Legend							
BFB = 4-Bromofluorobenzene (Surr)							
DFBZ = 1,4-Difluorobenzene (Surr)							

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(70-130)				
890-2135-A-1-E MS	Matrix Spike	84	86				
890-2135-A-1-F MSD	Matrix Spike Duplicate	87	93				
890-2136-1	FS02	94	104				
890-2136-2	FS03	94	107				
890-2136-3	FS07	95	107				
890-2136-4	FS08	88	97				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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	1CO2	OTPH2				
		(70-130)	(70-130)				
LCS 880-22336/2-A	Lab Control Sample	100	119				
LCSD 880-22336/3-A	Lab Control Sample Dup	98	117				
MB 880-22336/1-A	Method Blank	93	113				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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	MS 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	MSD Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-22266/5-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22266

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/25/22 07:30	03/25/22 10:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/25/22 07:30	03/25/22 10:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/25/22 07:30	03/25/22 10:42	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 07:30	03/25/22 10:42	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/25/22 07:30	03/25/22 10:42	1

Lab Sample ID: LCS 880-22266/1-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08853		mg/Kg		89	70 - 130
Toluene	0.100	0.08731		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.09324		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1909		mg/Kg		95	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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

Lab Sample ID: LCS 880-22266/1-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09386		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-22266/2-A

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08920		mg/Kg		89	70 - 130	1	35
Toluene	0.100	0.08871		mg/Kg		89	70 - 130	2	35
Ethylbenzene	0.100	0.09388		mg/Kg		94	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130	1	35
o-Xylene	0.100	0.09509		mg/Kg		95	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 890-2122-A-1-E MS

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.06367	F1	mg/Kg		64	70 - 130
Toluene	<0.00200	U F1	0.0996	0.07260		mg/Kg		71	70 - 130
Ethylbenzene	<0.00200	U	0.0996	0.07681		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1597		mg/Kg		79	70 - 130
o-Xylene	<0.00200	U	0.0996	0.08081		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2122-A-1-F MSD

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0992	0.07252		mg/Kg		73	70 - 130	13	35
Toluene	<0.00200	U F1	0.0992	0.06862	F1	mg/Kg		68	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0992	0.07502		mg/Kg		75	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1562		mg/Kg		77	70 - 130	2	35
o-Xylene	<0.00200	U	0.0992	0.07864		mg/Kg		78	70 - 130	3	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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

Lab Sample ID: 890-2122-A-1-F MSD

Matrix: Solid

Analysis Batch: 22323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22266

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	111		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

	MB	MB							
Analyte	Result	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	
	MB	MB							
Surrogate	%Recovery	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 880-22336/1-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22336

	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		03/25/22 10:30	03/25/22 11:33	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 11:33	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/25/22 10:30	03/25/22 11:33	1	
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	93		70 - 130			03/25/22 10:30	03/25/22 11:33	1	
o-Terphenyl	113		70 - 130			03/25/22 10:30	03/25/22 11:33	1	

Lab Sample ID: LCS 880-22336/2-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22336

	Spike	LCS	LCS						
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1020		mg/Kg		102	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	862.6		mg/Kg		86	70 - 130		
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	119		70 - 130						

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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

Lab Sample ID: LCSD 880-22336/3-A

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 22336

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1037		mg/Kg		104	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	892.3		mg/Kg		89	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	117		70 - 130						

Lab Sample ID: 890-2135-A-1-E MS

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 22336

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	819.4		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	744.8		mg/Kg		70	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	84		70 - 130								
o-Terphenyl	86		70 - 130								

Lab Sample ID: 890-2135-A-1-F MSD

Matrix: Solid

Analysis Batch: 22329

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 22336

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	845.1		mg/Kg		85	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	800.3		mg/Kg		76	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	87		70 - 130								
o-Terphenyl	93		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22993/1-A

Matrix: Solid

Analysis Batch: 23129

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			04/07/22 13:12	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-22993/2-A

Matrix: Solid

Analysis Batch: 23129

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-22993/3-A

Matrix: Solid

Analysis Batch: 23129

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2135-A-1-I MS

Matrix: Solid

Analysis Batch: 23129

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	59.6		248	300.1		mg/Kg		97	90 - 110

Lab Sample ID: 890-2135-A-1-J MSD

Matrix: Solid

Analysis Batch: 23129

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	59.6		248	310.6		mg/Kg		101	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

GC VOA

Prep Batch: 22243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-4	FS08	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: 22266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	5035	
890-2136-2	FS03	Total/NA	Solid	5035	
890-2136-3	FS07	Total/NA	Solid	5035	
MB 880-22266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2122-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2122-A-1-F 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: 22323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	8021B	22266
890-2136-2	FS03	Total/NA	Solid	8021B	22266
890-2136-3	FS07	Total/NA	Solid	8021B	22266
MB 880-22266/5-A	Method Blank	Total/NA	Solid	8021B	22266
LCS 880-22266/1-A	Lab Control Sample	Total/NA	Solid	8021B	22266
LCSD 880-22266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22266
890-2122-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	22266
890-2122-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22266

Analysis Batch: 22406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	Total BTEX	
890-2136-2	FS03	Total/NA	Solid	Total BTEX	
890-2136-3	FS07	Total/NA	Solid	Total BTEX	
890-2136-4	FS08	Total/NA	Solid	Total BTEX	

Analysis Batch: 22424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-4	FS08	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

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

GC Semi VOA

Analysis Batch: 22329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	8015B NM	22336
890-2136-2	FS03	Total/NA	Solid	8015B NM	22336
890-2136-3	FS07	Total/NA	Solid	8015B NM	22336
890-2136-4	FS08	Total/NA	Solid	8015B NM	22336
MB 880-22336/1-A	Method Blank	Total/NA	Solid	8015B NM	22336
LCS 880-22336/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22336
LCSD 880-22336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22336
890-2135-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	22336
890-2135-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22336

Prep Batch: 22336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	8015NM Prep	
890-2136-2	FS03	Total/NA	Solid	8015NM Prep	
890-2136-3	FS07	Total/NA	Solid	8015NM Prep	
890-2136-4	FS08	Total/NA	Solid	8015NM Prep	
MB 880-22336/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22336/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2135-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2135-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 22458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Total/NA	Solid	8015 NM	
890-2136-2	FS03	Total/NA	Solid	8015 NM	
890-2136-3	FS07	Total/NA	Solid	8015 NM	
890-2136-4	FS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 22993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Soluble	Solid	DI Leach	
890-2136-2	FS03	Soluble	Solid	DI Leach	
890-2136-3	FS07	Soluble	Solid	DI Leach	
890-2136-4	FS08	Soluble	Solid	DI Leach	
MB 880-22993/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 23129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2136-1	FS02	Soluble	Solid	300.0	22993
890-2136-2	FS03	Soluble	Solid	300.0	22993
890-2136-3	FS07	Soluble	Solid	300.0	22993
890-2136-4	FS08	Soluble	Solid	300.0	22993
MB 880-22993/1-A	Method Blank	Soluble	Solid	300.0	22993
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	300.0	22993

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

HPLC/IC (Continued)

Analysis Batch: 23129 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22993
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	300.0	22993
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22993

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

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS02

Lab Sample ID: 890-2136-1

Date Collected: 03/23/22 11:42

Matrix: Solid

Date Received: 03/24/22 09:23

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	22266	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 15:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22406	03/25/22 16:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22458	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 14:22	CH	XEN MID

Client Sample ID: FS03

Lab Sample ID: 890-2136-2

Date Collected: 03/23/22 11:44

Matrix: Solid

Date Received: 03/24/22 09:23

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	22266	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 15:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22406	03/25/22 16:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22458	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 15:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 14:29	CH	XEN MID

Client Sample ID: FS07

Lab Sample ID: 890-2136-3

Date Collected: 03/23/22 11:52

Matrix: Solid

Date Received: 03/24/22 09:23

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	22266	03/25/22 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 16:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22406	03/25/22 16:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22458	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 15:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 16:43	CH	XEN MID

Client Sample ID: FS08

Lab Sample ID: 890-2136-4

Date Collected: 03/23/22 11:54

Matrix: Solid

Date Received: 03/24/22 09:23

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 21:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22406	03/25/22 16:10	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

Client Sample ID: FS08
Date Collected: 03/23/22 11:54
Date Received: 03/24/22 09:23

Lab Sample ID: 890-2136-4
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			22458	03/28/22 10:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	22336	03/25/22 10:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22329	03/25/22 16:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1			23129	04/07/22 16:49	CH	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: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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: Macho Nacho 2H Battery

Job ID: 890-2136-1
SDG: 31403720.000 task 26.02

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

Sample Summary

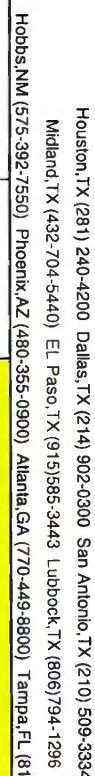
Client: WSP USA Inc.

Job ID: 890-2136-1

Project/Site: Macho Nacho 2H Battery

SDG: 31403720.000 task 26.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2136-1	FS02	Solid	03/23/22 11:42	03/24/22 09:23	1
890-2136-2	FS03	Solid	03/23/22 11:44	03/24/22 09:23	1
890-2136-3	FS07	Solid	03/23/22 11:52	03/24/22 09:23	1
890-2136-4	FS08	Solid	03/23/22 11:54	03/24/22 09:23	1



Chain of Custody

Work Order No:

Project Manager:	Katei Jennings	Bill to: (if different)	Katei 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:	Katei.jennings@wsp.com

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

Project Name:	Machdo Nacho 2H Battery	Turn Around
Project Number:	31403720.000 Task 26.02	Routine <input checked="" type="checkbox"/>
P.O. Number:		Rush: <input checked="" type="checkbox"/>
Sampler's Name:	Payton Benner	Due Date:

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	3.4/3.2		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Received intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID	TM003				
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2				
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers:					

[illegible][illegible]

Total 200.7 / 6010	200.8 / 6020:	
8RCRA	13PPM	Texas 11
		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
		8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
		1631 / 245.1 / 7470 / 7471 : Hg

of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$3 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. 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 \$3 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

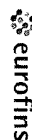
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3-24-22 0923			

Printed Date: 05/11/2025 2018

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2136-1

SDG Number: 31403720.000 task 26.02

Login Number: 2136

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2136-1
SDG Number: 31403720.000 task 26.02

Login Number: 2136

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/25/22 10:25 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9761-1

Laboratory Sample Delivery Group: 32.247778, -103.550278
Client Project/Site: Macho Nacho 2H 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:
1/5/2022 1:32:37 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Laboratory Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Qualifiers

GC 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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Job ID: 880-9761-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-9761-1

Receipt

The samples were received on 12/29/2021 4:26 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: 4-Bromofluorobenzene recovery for the following sample was outside control limits: SS05 (880-9761-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15866 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.

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: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS05

Lab Sample ID: 880-9761-1

Date Collected: 12/29/21 11:22

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/03/22 10:15	01/03/22 16:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/03/22 10:15	01/03/22 16:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/03/22 10:15	01/03/22 16:36	1
m-Xylene & p-Xylene	<0.00400	U F1	0.00400	mg/Kg		01/03/22 10:15	01/03/22 16:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/03/22 10:15	01/03/22 16:36	1
Xylenes, Total	<0.00400	U F1	0.00400	mg/Kg		01/03/22 10:15	01/03/22 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	01/03/22 10:15	01/03/22 16:36	1
1,4-Difluorobenzene (Surr)	122		70 - 130	01/03/22 10:15	01/03/22 16:36	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			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 09:21	01/03/22 17:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 17:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	141	S1+	70 - 130	01/03/22 09:21	01/03/22 17:19	1
o-Terphenyl	144	S1+	70 - 130	01/03/22 09:21	01/03/22 17:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.3		4.99	mg/Kg			01/03/22 19:08	1

Client Sample ID: SS06

Lab Sample ID: 880-9761-2

Date Collected: 12/29/21 11:26

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 16:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 16:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 16:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 16:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 16:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/03/22 10:15	01/03/22 16:57	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS06

Lab Sample ID: 880-9761-2

Date Collected: 12/29/21 11:26

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	01/03/22 10:15	01/03/22 16:57	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			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	501		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 09:21	01/03/22 17:39	1
Diesel Range Organics (Over C10-C28)	501		50.0	mg/Kg		01/03/22 09:21	01/03/22 17:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 17:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130			01/03/22 09:21	01/03/22 17:39	1
o-Terphenyl	137	S1+	70 - 130			01/03/22 09:21	01/03/22 17:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.3		4.95	mg/Kg			01/03/22 19:32	1

Client Sample ID: SS07

Lab Sample ID: 880-9761-3

Date Collected: 12/29/21 11:29

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 17:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	01/03/22 10:15	01/03/22 17:18	1
1,4-Difluorobenzene (Surr)	106		70 - 130	01/03/22 10:15	01/03/22 17:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			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, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS07

Lab Sample ID: 880-9761-3

Date Collected: 12/29/21 11:29

Matrix: Solid

Date Received: 12/29/21 16:26

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		01/03/22 09:21	01/03/22 17:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 17:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 17:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130			01/03/22 09:21	01/03/22 17:59	1
o-Terphenyl	140	S1+	70 - 130			01/03/22 09:21	01/03/22 17:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		4.98	mg/Kg			01/03/22 19:40	1

Client Sample ID: SS08

Lab Sample ID: 880-9761-4

Date Collected: 12/29/21 11:32

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/03/22 10:15	01/03/22 17:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			01/03/22 10:15	01/03/22 17:38	1
1,4-Difluorobenzene (Surr)	94		70 - 130			01/03/22 10:15	01/03/22 17:38	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			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 09:21	01/03/22 18:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/22 09:21	01/03/22 18:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/22 09:21	01/03/22 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130			01/03/22 09:21	01/03/22 18:19	1
o-Terphenyl	160	S1+	70 - 130			01/03/22 09:21	01/03/22 18:19	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS08
Date Collected: 12/29/21 11:32
Date Received: 12/29/21 16:26
Sample Depth: 0.5'

Lab Sample ID: 880-9761-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	9.12		4.97	mg/Kg			01/03/22 19:48	1	

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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)
880-9761-1	SS05	138 S1+	122
880-9761-1 MS	SS05	105	103
880-9761-1 MSD	SS05	115	112
880-9761-2	SS06	114	108
880-9761-3	SS07	101	106
880-9761-4	SS08	109	94
LCS 880-15880/1-A	Lab Control Sample	110	104
LCSD 880-15880/2-A	Lab Control Sample Dup	104	99
MB 880-15880/5-A	Method Blank	118	104
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)
880-9761-1	SS05	141 S1+	144 S1+
880-9761-2	SS06	137 S1+	137 S1+
880-9761-3	SS07	137 S1+	140 S1+
880-9761-4	SS08	159 S1+	160 S1+
890-1777-A-1-D MS	Matrix Spike	130	114
890-1777-A-1-E MSD	Matrix Spike Duplicate	138 S1+	123
LCS 880-15866/2-A	Lab Control Sample	98	84
LCSD 880-15866/3-A	Lab Control Sample Dup	98	82
MB 880-15866/1-A	Method Blank	120	131 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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	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: 880-9761-1 MS

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: SS05

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

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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

Lab Sample ID: 880-9761-1 MS

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: SS05

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: 880-9761-1 MSD

Matrix: Solid

Analysis Batch: 15550

Client Sample ID: SS05

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

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

Lab Sample ID: MB 880-15866/1-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15866

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		01/03/22 09:21	01/03/22 10:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 10:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	01/03/22 09:21	01/03/22 10:57	1
o-Terphenyl	131	S1+	70 - 130	01/03/22 09:21	01/03/22 10:57	1

Lab Sample ID: LCS 880-15866/2-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	854.9		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1104		mg/Kg		110	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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

Lab Sample ID: LCS 880-15866/2-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15866

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-15866/3-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	839.8		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1146		mg/Kg		115	70 - 130	4	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 890-1777-A-1-D MS

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	543.8	F1	mg/Kg		53	70 - 130		
Diesel Range Organics (Over C10-C28)	174	F1	996	554.2	F1	mg/Kg		38	70 - 130		

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

Lab Sample ID: 890-1777-A-1-E MSD

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	566.8	F1	mg/Kg		55	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	174	F1	999	602.0	F1	mg/Kg		43	70 - 130	8	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	123		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15805/1-A

Matrix: Solid

Analysis Batch: 15922

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			01/03/22 18:45	1

Lab Sample ID: LCS 880-15805/2-A

Matrix: Solid

Analysis Batch: 15922

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.6		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-15805/3-A

Matrix: Solid

Analysis Batch: 15922

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	244.8		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-9761-1 MS

Matrix: Solid

Analysis Batch: 15922

Client Sample ID: SS05

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	14.3		250	247.8		mg/Kg		94	90 - 110

Lab Sample ID: 880-9761-1 MSD

Matrix: Solid

Analysis Batch: 15922

Client Sample ID: SS05

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14.3		250	240.2		mg/Kg		91	90 - 110	3	20

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

GC VOA

Analysis Batch: 15550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	8021B	15880
880-9761-2	SS06	Total/NA	Solid	8021B	15880
880-9761-3	SS07	Total/NA	Solid	8021B	15880
880-9761-4	SS08	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
880-9761-1 MS	SS05	Total/NA	Solid	8021B	15880
880-9761-1 MSD	SS05	Total/NA	Solid	8021B	15880

Prep Batch: 15880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	5035	
880-9761-2	SS06	Total/NA	Solid	5035	
880-9761-3	SS07	Total/NA	Solid	5035	
880-9761-4	SS08	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	
880-9761-1 MS	SS05	Total/NA	Solid	5035	
880-9761-1 MSD	SS05	Total/NA	Solid	5035	

Analysis Batch: 16096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	Total BTEX	
880-9761-2	SS06	Total/NA	Solid	Total BTEX	
880-9761-3	SS07	Total/NA	Solid	Total BTEX	
880-9761-4	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	8015NM Prep	
880-9761-2	SS06	Total/NA	Solid	8015NM Prep	
880-9761-3	SS07	Total/NA	Solid	8015NM Prep	
880-9761-4	SS08	Total/NA	Solid	8015NM Prep	
MB 880-15866/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15866/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1777-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1777-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	8015B NM	15866
880-9761-2	SS06	Total/NA	Solid	8015B NM	15866
880-9761-3	SS07	Total/NA	Solid	8015B NM	15866
880-9761-4	SS08	Total/NA	Solid	8015B NM	15866
MB 880-15866/1-A	Method Blank	Total/NA	Solid	8015B NM	15866
LCS 880-15866/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15866

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

GC Semi VOA (Continued)

Analysis Batch: 15874 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-15866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15866
890-1777-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	15866
890-1777-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15866

Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Total/NA	Solid	8015 NM	
880-9761-2	SS06	Total/NA	Solid	8015 NM	
880-9761-3	SS07	Total/NA	Solid	8015 NM	
880-9761-4	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Soluble	Solid	DI Leach	
880-9761-2	SS06	Soluble	Solid	DI Leach	
880-9761-3	SS07	Soluble	Solid	DI Leach	
880-9761-4	SS08	Soluble	Solid	DI Leach	
MB 880-15805/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15805/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15805/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9761-1 MS	SS05	Soluble	Solid	DI Leach	
880-9761-1 MSD	SS05	Soluble	Solid	DI Leach	

Analysis Batch: 15922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9761-1	SS05	Soluble	Solid	300.0	15805
880-9761-2	SS06	Soluble	Solid	300.0	15805
880-9761-3	SS07	Soluble	Solid	300.0	15805
880-9761-4	SS08	Soluble	Solid	300.0	15805
MB 880-15805/1-A	Method Blank	Soluble	Solid	300.0	15805
LCS 880-15805/2-A	Lab Control Sample	Soluble	Solid	300.0	15805
LCSD 880-15805/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15805
880-9761-1 MS	SS05	Soluble	Solid	300.0	15805
880-9761-1 MSD	SS05	Soluble	Solid	300.0	15805

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS05

Lab Sample ID: 880-9761-1

Date Collected: 12/29/21 11:22

Matrix: Solid

Date Received: 12/29/21 16:26

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15550	01/03/22 16:36	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 17:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 19:08	CH	XEN MID

Client Sample ID: SS06

Lab Sample ID: 880-9761-2

Date Collected: 12/29/21 11:26

Matrix: Solid

Date Received: 12/29/21 16:26

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15550	01/03/22 16:57	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 17:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 19:32	CH	XEN MID

Client Sample ID: SS07

Lab Sample ID: 880-9761-3

Date Collected: 12/29/21 11:29

Matrix: Solid

Date Received: 12/29/21 16:26

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15550	01/03/22 17:18	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 17:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 19:40	CH	XEN MID

Client Sample ID: SS08

Lab Sample ID: 880-9761-4

Date Collected: 12/29/21 11:32

Matrix: Solid

Date Received: 12/29/21 16:26

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	15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15550	01/03/22 17:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Client Sample ID: SS08 Lab Sample ID: 880-9761-4
Date Collected: 12/29/21 11:32 Matrix: Solid
Date Received: 12/29/21 16:26

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			10.02 g	10 mL	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 18:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 19:48	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9761-1
SDG: 32.247778, -103.550278

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9761-1	SS05	Solid	12/29/21 11:22	12/29/21 16:26	0.5'
880-9761-2	SS06	Solid	12/29/21 11:26	12/29/21 16:26	0.5'
880-9761-3	SS07	Solid	12/29/21 11:29	12/29/21 16:26	0.5'
880-9761-4	SS08	Solid	12/29/21 11:32	12/29/21 16:26	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



880-9761 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager	Kalei Jennings	Bill To (if different)	
Company Name	WSP USA	Company Name	
Address	3300 N 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	<input type="checkbox"/> PRF <input type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund
State of Project	
Reporting Level	<input type="checkbox"/> Level <input type="checkbox"/> PST/US <input type="checkbox"/> TRF <input checked="" type="checkbox"/> Level
Deliverables	EDD <input checked="" type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	Macho Nacho 2H Battery	Turn Around	<input checked="" type="checkbox"/>
Project Number	31403720	Routine	<input checked="" type="checkbox"/>
Project Location	32 247778, -103 550278	Rush	<input type="checkbox"/>
Sampler's Name	Hadlie Green	Due Date	5 DAY TAT
PO #			
SAMPLE RECEIPT			
Temperature (°C)	4.3/4.3	Temp Blank	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	IPB
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	1.0
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Total Containers	10

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300 0)	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SS05	SL	12/29/2021	11 22	0.5'	1	X	X	X		HN	402
SS05	SL	12/29/2021	11 26	0.5'	1	X	X	X		H2SO4 H2	
SS07	SL	12/29/2021	11 29	0.5'	1	X	X	X		HCL HL	
SS08	SL	12/29/2021	11 32	0.5'	1	X	X	X		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	12/29/21			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-9761-1

SDG Number: 32.247778, -103.550278

Login Number: 9761

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9762-1

Laboratory Sample Delivery Group: 32.247778, -103.550278
Client Project/Site: Macho Nacho 2H 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:
1/5/2022 1:32:37 PM

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

LINKS

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results through

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www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Laboratory Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Qualifiers

GC 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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Job ID: 880-9762-1

Laboratory: Eurofins Xenco, Midland**Narrative**

**Job Narrative
880-9762-1****Receipt**

The samples were received on 12/29/2021 4:26 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

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 880-15866 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.

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: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS01

Lab Sample ID: 880-9762-1

Date Collected: 12/29/21 10:01

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 20:47	1
Toluene	0.00999		0.00200	mg/Kg		12/30/21 14:30	01/02/22 20:47	1
Ethylbenzene	0.00558		0.00200	mg/Kg		12/30/21 14:30	01/02/22 20:47	1
m-Xylene & p-Xylene	0.0171		0.00399	mg/Kg		12/30/21 14:30	01/02/22 20:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 20:47	1
Xylenes, Total	0.0171		0.00399	mg/Kg		12/30/21 14:30	01/02/22 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	12/30/21 14:30	01/02/22 20:47	1
1,4-Difluorobenzene (Surr)	91		70 - 130	12/30/21 14:30	01/02/22 20:47	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0327		0.00399	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	618		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 09:21	01/03/22 18:39	1
Diesel Range Organics (Over C10-C28)	618		50.0	mg/Kg		01/03/22 09:21	01/03/22 18:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	01/03/22 09:21	01/03/22 18:39	1
o-Terphenyl	133	S1+	70 - 130	01/03/22 09:21	01/03/22 18:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		5.01	mg/Kg			01/03/22 19:56	1

Client Sample ID: SS02

Lab Sample ID: 880-9762-2

Date Collected: 12/29/21 10:04

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		12/30/21 14:30	01/02/22 21:15	1
Toluene	<0.00198	U	0.00198	mg/Kg		12/30/21 14:30	01/02/22 21:15	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		12/30/21 14:30	01/02/22 21:15	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		12/30/21 14:30	01/02/22 21:15	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		12/30/21 14:30	01/02/22 21:15	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		12/30/21 14:30	01/02/22 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	12/30/21 14:30	01/02/22 21:15	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS02

Lab Sample ID: 880-9762-2

Date Collected: 12/29/21 10:04

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	83		70 - 130	12/30/21 14:30	01/02/22 21:15	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			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	88.4		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 09:21	01/03/22 19:00	1
Diesel Range Organics (Over C10-C28)	88.4		49.9	mg/Kg		01/03/22 09:21	01/03/22 19:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/22 09:21	01/03/22 19:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130			01/03/22 09:21	01/03/22 19:00	1
o-Terphenyl	138	S1+	70 - 130			01/03/22 09:21	01/03/22 19:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.0		4.98	mg/Kg			01/03/22 20:19	1

Client Sample ID: SS03

Lab Sample ID: 880-9762-3

Date Collected: 12/29/21 10:09

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 21:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 21:42	1
Ethylbenzene	0.00589		0.00200	mg/Kg		12/30/21 14:30	01/02/22 21:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		12/30/21 14:30	01/02/22 21:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 21:42	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/30/21 14:30	01/02/22 21:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	167	S1+	70 - 130	12/30/21 14:30	01/02/22 21:42	1
1,4-Difluorobenzene (Surr)	94		70 - 130	12/30/21 14:30	01/02/22 21:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00589		0.00401	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	78.8		50.0	mg/Kg			01/05/22 14:19	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS03

Lab Sample ID: 880-9762-3

Date Collected: 12/29/21 10:09

Matrix: Solid

Date Received: 12/29/21 16:26

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		01/03/22 09:21	01/03/22 19:21	1
Diesel Range Organics (Over C10-C28)	78.8		50.0	mg/Kg		01/03/22 09:21	01/03/22 19:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	164	S1+	70 - 130			01/03/22 09:21	01/03/22 19:21	1
o-Terphenyl	160	S1+	70 - 130			01/03/22 09:21	01/03/22 19:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.85		5.05	mg/Kg			01/03/22 20:27	1

Client Sample ID: SS04

Lab Sample ID: 880-9762-4

Date Collected: 12/29/21 10:12

Matrix: Solid

Date Received: 12/29/21 16:26

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
Toluene	0.00397		0.00199	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/30/21 14:30	01/02/22 22:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130			12/30/21 14:30	01/02/22 22:09	1
1,4-Difluorobenzene (Surr)	95		70 - 130			12/30/21 14:30	01/02/22 22:09	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			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	181		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 09:21	01/03/22 19:42	1
Diesel Range Organics (Over C10-C28)	181		50.0	mg/Kg		01/03/22 09:21	01/03/22 19:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 19:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130			01/03/22 09:21	01/03/22 19:42	1
o-Terphenyl	132	S1+	70 - 130			01/03/22 09:21	01/03/22 19:42	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS04
Date Collected: 12/29/21 10:12
Date Received: 12/29/21 16:26
Sample Depth: 0.5'

Lab Sample ID: 880-9762-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	10.7		5.02	mg/Kg			01/03/22 20:35	1	

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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)
880-9762-1	SS01	159 S1+	91
880-9762-2	SS02	111	83
880-9762-3	SS03	167 S1+	94
880-9762-4	SS04	158 S1+	95
890-1776-A-1-B MS	Matrix Spike	154 S1+	98
890-1776-A-1-C MSD	Matrix Spike Duplicate	151 S1+	97
LCS 880-15815/1-A	Lab Control Sample	143 S1+	110
LCSD 880-15815/2-A	Lab Control Sample Dup	127	108
MB 880-15812/5-A	Method Blank	90	87
MB 880-15815/5-A	Method Blank	103	89
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)
880-9762-1	SS01	135 S1+	133 S1+
880-9762-2	SS02	145 S1+	138 S1+
880-9762-3	SS03	164 S1+	160 S1+
880-9762-4	SS04	131 S1+	132 S1+
890-1777-A-1-D MS	Matrix Spike	130	114
890-1777-A-1-E MSD	Matrix Spike Duplicate	138 S1+	123
LCS 880-15866/2-A	Lab Control Sample	98	84
LCSD 880-15866/3-A	Lab Control Sample Dup	98	82
MB 880-15866/1-A	Method Blank	120	131 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15812/5-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15812

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:12	01/01/22 21:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/30/21 14:12	01/01/22 21:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/30/21 14:12	01/01/22 21:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	12/30/21 14:12	01/01/22 21:46	1
1,4-Difluorobenzene (Surr)	87		70 - 130	12/30/21 14:12	01/01/22 21:46	1

Lab Sample ID: MB 880-15815/5-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15815

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 11:39	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 11:39	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 11:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/30/21 14:30	01/02/22 11:39	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/30/21 14:30	01/02/22 11:39	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/30/21 14:30	01/02/22 11:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	12/30/21 14:30	01/02/22 11:39	1
1,4-Difluorobenzene (Surr)	89		70 - 130	12/30/21 14:30	01/02/22 11:39	1

Lab Sample ID: LCS 880-15815/1-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07276		mg/Kg		73	70 - 130
Toluene	0.100	0.07253		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.07747		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	0.200	0.1561		mg/Kg		78	70 - 130
o-Xylene	0.100	0.07824		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-15815/2-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15815

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07279		mg/Kg		73	70 - 130	0	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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

Lab Sample ID: LCSD 880-15815/2-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15815

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Toluene	0.100	0.07183		mg/Kg		72	70 - 130	1	35
Ethylbenzene	0.100	0.07053		mg/Kg		71	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1413		mg/Kg		71	70 - 130	10	35
o-Xylene	0.100	0.07162		mg/Kg		72	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-1776-A-1-B MS

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.101	0.05921	F1	mg/Kg		59	70 - 130
Toluene	0.00700	F1	0.101	0.06059	F1	mg/Kg		53	70 - 130
Ethylbenzene	0.00553	F1	0.101	0.06163	F1	mg/Kg		56	70 - 130
m-Xylene & p-Xylene	0.0185	F1	0.202	0.1375	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00199	U F1	0.101	0.05260	F1	mg/Kg		52	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-1776-A-1-C MSD

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U F1	0.0998	0.05476	F1	mg/Kg		55	70 - 130	8	35
Toluene	0.00700	F1	0.0998	0.05680	F1	mg/Kg		50	70 - 130	6	35
Ethylbenzene	0.00553	F1	0.0998	0.04772	F1	mg/Kg		42	70 - 130	25	35
m-Xylene & p-Xylene	0.0185	F1	0.200	0.1112	F1	mg/Kg		46	70 - 130	21	35
o-Xylene	<0.00199	U F1	0.0998	0.04595	F1	mg/Kg		46	70 - 130	13	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-15866/1-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15866

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		01/03/22 09:21	01/03/22 10:57	1

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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

Lab Sample ID: MB 880-15866/1-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15866

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		01/03/22 09:21	01/03/22 10:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/22 09:21	01/03/22 10:57	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			01/03/22 09:21	01/03/22 10:57	1
o-Terphenyl	131	S1+	70 - 130			01/03/22 09:21	01/03/22 10:57	1

Lab Sample ID: LCS 880-15866/2-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	854.9		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1104		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	84		70 - 130				

Lab Sample ID: LCSD 880-15866/3-A

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	839.8		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1146		mg/Kg		115	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 890-1777-A-1-D MS

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	543.8	F1	mg/Kg		53	70 - 130
Diesel Range Organics (Over C10-C28)	174	F1	996	554.2	F1	mg/Kg		38	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	130		70 - 130						
o-Terphenyl	114		70 - 130						

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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

Lab Sample ID: 890-1777-A-1-E MSD

Matrix: Solid

Analysis Batch: 15874

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15866

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	566.8	F1	mg/Kg		55	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	174	F1	999	602.0	F1	mg/Kg		43	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	138	S1+	70 - 130								
o-Terphenyl	123		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15805/1-A

Matrix: Solid

Analysis Batch: 15922

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			01/03/22 18:45	1

Lab Sample ID: LCS 880-15805/2-A

Matrix: Solid

Analysis Batch: 15922

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.6		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-15805/3-A

Matrix: Solid

Analysis Batch: 15922

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	244.8		mg/Kg		98	90 - 110	0	20

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

Matrix: Solid

Analysis Batch: 15922

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	14.3		250	247.8		mg/Kg		94	90 - 110

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

Matrix: Solid

Analysis Batch: 15922

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	14.3		250	240.2		mg/Kg		91	90 - 110	3	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

GC VOA

Prep Batch: 15812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15812/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 15815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	5035	
880-9762-2	SS02	Total/NA	Solid	5035	
880-9762-3	SS03	Total/NA	Solid	5035	
880-9762-4	SS04	Total/NA	Solid	5035	
MB 880-15815/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15815/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15815/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1776-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-1776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 15844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	8021B	15815
880-9762-2	SS02	Total/NA	Solid	8021B	15815
880-9762-3	SS03	Total/NA	Solid	8021B	15815
880-9762-4	SS04	Total/NA	Solid	8021B	15815
MB 880-15812/5-A	Method Blank	Total/NA	Solid	8021B	15812
MB 880-15815/5-A	Method Blank	Total/NA	Solid	8021B	15815
LCS 880-15815/1-A	Lab Control Sample	Total/NA	Solid	8021B	15815
LCSD 880-15815/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15815
890-1776-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	15815
890-1776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15815

Analysis Batch: 16096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	Total BTEX	
880-9762-2	SS02	Total/NA	Solid	Total BTEX	
880-9762-3	SS03	Total/NA	Solid	Total BTEX	
880-9762-4	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	8015NM Prep	
880-9762-2	SS02	Total/NA	Solid	8015NM Prep	
880-9762-3	SS03	Total/NA	Solid	8015NM Prep	
880-9762-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-15866/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15866/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1777-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1777-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	8015B NM	15866

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

GC Semi VOA (Continued)

Analysis Batch: 15874 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-2	SS02	Total/NA	Solid	8015B NM	15866
880-9762-3	SS03	Total/NA	Solid	8015B NM	15866
880-9762-4	SS04	Total/NA	Solid	8015B NM	15866
MB 880-15866/1-A	Method Blank	Total/NA	Solid	8015B NM	15866
LCS 880-15866/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15866
LCSD 880-15866/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15866
890-1777-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	15866
890-1777-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15866

Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Total/NA	Solid	8015 NM	
880-9762-2	SS02	Total/NA	Solid	8015 NM	
880-9762-3	SS03	Total/NA	Solid	8015 NM	
880-9762-4	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Soluble	Solid	DI Leach	
880-9762-2	SS02	Soluble	Solid	DI Leach	
880-9762-3	SS03	Soluble	Solid	DI Leach	
880-9762-4	SS04	Soluble	Solid	DI Leach	
MB 880-15805/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15805/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15805/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9761-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9761-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 15922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9762-1	SS01	Soluble	Solid	300.0	15805
880-9762-2	SS02	Soluble	Solid	300.0	15805
880-9762-3	SS03	Soluble	Solid	300.0	15805
880-9762-4	SS04	Soluble	Solid	300.0	15805
MB 880-15805/1-A	Method Blank	Soluble	Solid	300.0	15805
LCS 880-15805/2-A	Lab Control Sample	Soluble	Solid	300.0	15805
LCSD 880-15805/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15805
880-9761-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	15805
880-9761-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15805

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS01

Lab Sample ID: 880-9762-1

Date Collected: 12/29/21 10:01

Matrix: Solid

Date Received: 12/29/21 16:26

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	15815	12/30/21 14:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15844	01/02/22 20:47	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 18:39	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 19:56	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 880-9762-2

Date Collected: 12/29/21 10:04

Matrix: Solid

Date Received: 12/29/21 16:26

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	15815	12/30/21 14:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15844	01/02/22 21:15	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 19:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 20:19	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 880-9762-3

Date Collected: 12/29/21 10:09

Matrix: Solid

Date Received: 12/29/21 16:26

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	15815	12/30/21 14:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15844	01/02/22 21:42	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	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 19:21	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 20:27	CH	XEN MID

Client Sample ID: SS04

Lab Sample ID: 880-9762-4

Date Collected: 12/29/21 10:12

Matrix: Solid

Date Received: 12/29/21 16:26

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	15815	12/30/21 14:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15844	01/02/22 22:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16096	01/05/22 13:44	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Client Sample ID: SS04 Lab Sample ID: 880-9762-4
Date Collected: 12/29/21 10:12 Matrix: Solid
Date Received: 12/29/21 16:26

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			10.01 g	10 mL	15866	01/03/22 09:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15874	01/03/22 19:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	15805	12/30/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1			15922	01/03/22 20:35	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: Macho Nacho 2H Battery

Job ID: 880-9762-1
SDG: 32.247778, -103.550278

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9762-1	SS01	Solid	12/29/21 10:01	12/29/21 16:26	0.5'
880-9762-2	SS02	Solid	12/29/21 10:04	12/29/21 16:26	0.5'
880-9762-3	SS03	Solid	12/29/21 10:09	12/29/21 16:26	0.5'
880-9762-4	SS04	Solid	12/29/21 10:12	12/29/21 16:26	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) 794-1236
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



880-9762 Chain of Custody

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

www.xenco.com Page 1 of 1	
Work Order Comments	
Program <input type="checkbox"/> PST <input type="checkbox"/> PRF <input type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project	
Reporting Level <input type="checkbox"/>	Level <input type="checkbox"/> PST/US <input type="checkbox"/> TRF <input type="checkbox"/> Level <input checked="" type="checkbox"/>
Deliverables EDD <input checked="" type="checkbox"/>	Adapt <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	Macho Nacho 2H Battery	Turn Around	<input checked="" type="checkbox"/>
Project Number	31403720	Routine	<input checked="" type="checkbox"/>
Project Location	32 247778, -103 550278	Rush	<input type="checkbox"/>
Sampler's Name	Hadlie Green	Due Date	5/24/21
PO #			

SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C)	4.24.3	Thermometer ID				
Received Intact	Yes	No				
Cooler Custody Seals	Yes	No	Correction Factor	10		
Sample Custody Seals	Yes	No	Total Containers	10		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300 0)	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SS01	SL	12/29/2021	10 01	0.5'	1	X	X	X		HNO3 HN	402
SS02	SL	12/29/2021	10 04	0.5'	1	X	X	X		H2SO4 H2	
SS03	SL	12/29/2021	10 09	0.5'	1	X	X	X		HCL HL	
SS04	SL	12/29/2021	10 12	0.5'	1	X	X	X		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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Hadlie Green	Hadlie Green	12/29/21 10:24			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-9762-1

SDG Number: 32.247778, -103.550278

Login Number: 9762

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland

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



APPENDIX E

NMOCD Notifications

From: [Nobui, Jennifer, EMNRD](#)
To: [Kalei Jennings](#)
Cc: [Bratcher, Mike, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)
Subject: FW: [EXTERNAL] COP- Sampling Notification (Week of 5/23/22-5/27/22)
Date: Thursday, May 19, 2022 12:29:01 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

[**EXTERNAL EMAIL**]

Kalei,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Thursday, May 19, 2022 10:40 AM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Subject: Fw: [EXTERNAL] COP- Sampling Notification (Week of 5/23/22-5/27/22)

From: Kalei Jennings <kjennings@ensolum.com>
Sent: Thursday, May 19, 2022 10:21 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Cc: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>
Subject: [EXTERNAL] COP- Sampling Notification (Week of 5/23/22-5/27/22)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

COP plans to complete final sampling activities at the following sites the week of May 23, 2022.

Monday

- Mortarboard Federal Com 013H / NAPP2206950640
- Montera Federal 10M CTB / NAPP2135442784

Tuesday

- Montera Federal 10M CTB / NAPP2135442784

Wednesday

- Macho Nacho 002H / NAPP200644754

Thursday

- Macho Nacho 002H / NAPP200644754

Friday

Thank you,



Kalei Jennings

Senior Scientist

817-683-2503

Ensolum, LLC





APPENDIX F 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	NAPP2200644754
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688-9057
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2200644754
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.247778 Longitude -103.550278
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Macho Nacho 002H	Site Type	Tank Battery
Date Release Discovered	December 21, 2021	API# (if applicable)	

Unit Letter	Section	Township	Range	County
E	02	24S	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 checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 1.3	Volume Recovered (bbls) 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release


The release was caused by a Separator high leveled and sent fluid out the flare. Dump controller failed and high level kill malfunctioned. The release occurred on the facility pad. ConocoPhillips will have the spill area evaluated for any possible impact from the release.

Incident ID	NAPP2200644754
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 release involved a fire.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given by Kelsy Waggaman via e-mail December 21, 2021 at 11:12 am to 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: Brittany N. Esparza	Title: Environmental Technician
Signature: 	Date: 1/6/2022
email: Brittany.Esparza@ConocoPhillips.com	Telephone: (432) 221-0398
<u>OCD Only</u>	
Received by: Ramona Marcus	Date: 1/6/2022

L48 Spill Volume Estimate Form

Received by OCD: 1/6/2022 12:28:58 PM	Facility Name & Number:	Macho State 2 Battery	Page 3 of 3
	Asset Area:	DBE	NAPP2200644754
	Release Discovery Date & Time:	12/21/2021	
	Release Type:	Oil	
	Provide any known details about the event:	High level at inlet seperator	

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	162.1	22.1	0.10	12.60%	5.314	0.670
Rectangle B	151.3	22.1	0.10	12.60%	4.960	0.625
Rectangle C					0.000	0.000
Rectangle D					0.000	0.000
Rectangle E					0.000	0.000
Rectangle F					0.000	0.000
Rectangle G					0.000	0.000
Rectangle H					0.000	0.000
Rectangle I					0.000	0.000
Released to Imaging: 1/6/2022 3:58:31 PM					0.000	0.000
Total Volume Release:						1.294

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 70866

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 70866
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	1/6/2022

Incident ID	NAPP2200644754
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><50</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2200644754
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: __Charles Beauvais____ Title: __Senior Environmental Engineer____

Signature: Charles R. Beauvais Date: __06/15/2022____

email: __Charles.R.Beauvais@conocophillips.com____ Telephone: __575-988-2043____

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2200644754
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Charles Beauvais Title: Senior Environmental Engineer

Signature: Charles R. Beauvais Date: 06/15/2022

email: Charles.R.Beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: 07/06/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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 120272

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 120272
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	7/6/2022