ENSOLUM

September 1, 2022

District 1
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: Revised Remediation Work Plan
Red Bull 35 Federal 001
Incident Number NAPP2126444907
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of ConocoPhillips Company (COP), has prepared this Revised Remediation Work Plan (Work Plan) to document site assessment and soil sampling activities completed to date and propose remedial actions to address the residual impacted soil identified at the Red Bull 35 Federal 001 (Site), following a crude oil flare fire. The following Work Plan proposes lateral and vertical delineation of the release and excavation of impacted soil.

This Work Plan is an update to the original Remediation Work Plan submitted on August 2, 2022. This update addresses the August 2, 2022, email from the New Mexico Oil Conservation Division (NMOCD) stating the depth to groundwater has not been adequately determined. NMOCD responded that nearby wells used to determine depth to groundwater should be no further than ½ miles away from the Site and data should be no more than 25 years old. The alternative remedial option is to remediate to the most stringent levels to Table 1 Closure Criteria. A copy of the email correspondence is provided as an attachment to this report.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 35, Township 25 South, Range 33 East, in Lea County, New Mexico (32.08518° N, 103.5452° W) and is associated with oil and gas exploration and production operations on private land.

On September 3, 2021, a flare released a approximately 0.01 barrels (bbls) crude oil, which ignited and extinguished itself after reaching the ground. COP immediately reported the release to the NMOCD on September 3, 2021 and submitted a Release Notification Form C-141 (Form C-141) on September 21, 2021. The release was assigned Incident Number NAPP2126444907.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-02313, located just over ½-mile northwest of the Site. The groundwater well has a reported depth to groundwater of 110 feet bgs and a total depth of 150 feet bgs. Ground surface elevation at the groundwater well location is 3,323 feet above mean sea level (amsl), which is approximately 2 feet lower in elevation than the Site. Regionally, depth to grounfwater data from 10 wells indicates depth to groundwater ranges from 110 feet (C-02313) to 220 feet bgs (C-02285-POD-1). Depth to water beneath the Site, based on regional data and the closest water well data, has been reasonably esimtated to be greater than 100 feet bgs. 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 an emergent wetland, located approximately 3,404 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)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On September 27, 2021 and October 20, 2021, WSP, Inc (WSP), the former consultant completed a Site visit 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 at a depth of 0.5 feet bgs. Preliminary soil samples SS01 through SS04 were collected within the release extent on pad and preliminary soil samples SS05 through SS09 were collected around the release extent to confirm the lateral exent of the relase, also on pad. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

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

Laboratory analytical results for preliminary soil samples SS01 through SS04 indicated TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for preliminary soil samples SS05 through SS09 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and compliant with the most stringent Table 1 Closure Citeria and successfully define the lateral extent of the release. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation activities appeared warranted.

On December 6, 2021 and March 10, 2022, delineation activities were conducted at the Site to assess the vertical extent of impacted soil. Potholes PH01 through PH06 were advanced via track mounted backhoe within and around the release extent on pad. The delineation potholes were advanced to depths ranging from 4 feet bgs to 7 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 7 feet bgs. Soil from the potholes was field screened for VOCs and chloride. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil samples were handled and analyzed as described above. The delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for the delineation soil samples collected from pothole PH01 and PH03 indicated TPH concentrations exceeded the Site Closure Criteria at depths ranging from 1-foot to 2 feet bgs. Laboratory analytical results for the delineation soil samples collected from potholes PH02, and PH04 through PH06 at depths ranging from 1-foot to 4 feet bgs, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. In addition, delineation activities have vertically delineated the release to the most stringent Table 1 Closure Criteria. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIAL ACTIONS

The results from the delineation soil sampling suggest soil containing elevated TPH concentrations is present in the vicinity of potholes PH01 and PH03 and surficial soil samples SS01 through SS04 and extends from the ground surface to approximately 2 feet bgs.

COP requests approval to complete the following remediation activities:

- In order to confirm depth to groundwater is greater than 100 feet bgs at the Site and confirm the applied Closure Criteria, Ensolum and COP propose to complete a depth to water boring within 0.5 miles of the release. The soil boring will be advanced to a depth of approximately 110 feet bgs or until groundwater is encountered. An Ensolum geologist will log and describe soils continuously and will document observations on a lithologic/ soil sampling log. The borehole will be left open for at least 72 hours to allow for the potential slow infill of groundwater. Following the 72-hour waiting period depth to groundwater will be measured or the Ensolum geologist will confirm the boring is dry. The borehole will be properly abandoned following NMOSE procedures. Ensolum and COG will include documentation of the soil boring installation and lithologic/ soil sampling log in the subsequent closure request.
- Following confirmation that depth to water is greater than 100 feet bgs, impacted soil in the vicinity of potholes PH01 and PH03 as well as surficial soil samples SS01 through SS04 will be excavated to meet the defined Closure Criteria described in this Work Plan. The excavation is anticipated to be completed to a depth of approximately 3 feet bgs.
- Upon completion of excavation activities, 5-point composite confirmation samples will be collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-

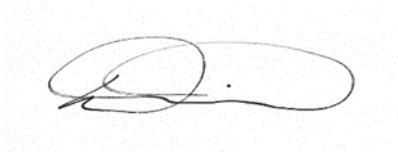
gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation samples will be submitted for laboratory analysis of BTEX, TPH, and chloride.

- An estimated 35 cubic yards of impacted soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions.

COP will complete the excavation activities within 90 days of the date of approval of this Work Plan by the NMOCD. The depth to water boring will be completed as soon as possible following approval from the surface landowner and scheduling with a driller. A final report requesting closure will be submitted within three weeks of receipt of final laboratory analytical results. COP believes this Work Plan is protective of human health, the environment, and groundwater and respectfully request approval for Incident Number NAPP2126444907. The Final C-141 is included in Appendix F.

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

Sincerely,
Ensolum, LLC



Kalei Jennings
Senior Scientist

Daniel R. Moir, P.G.
Senior Managing Geologist

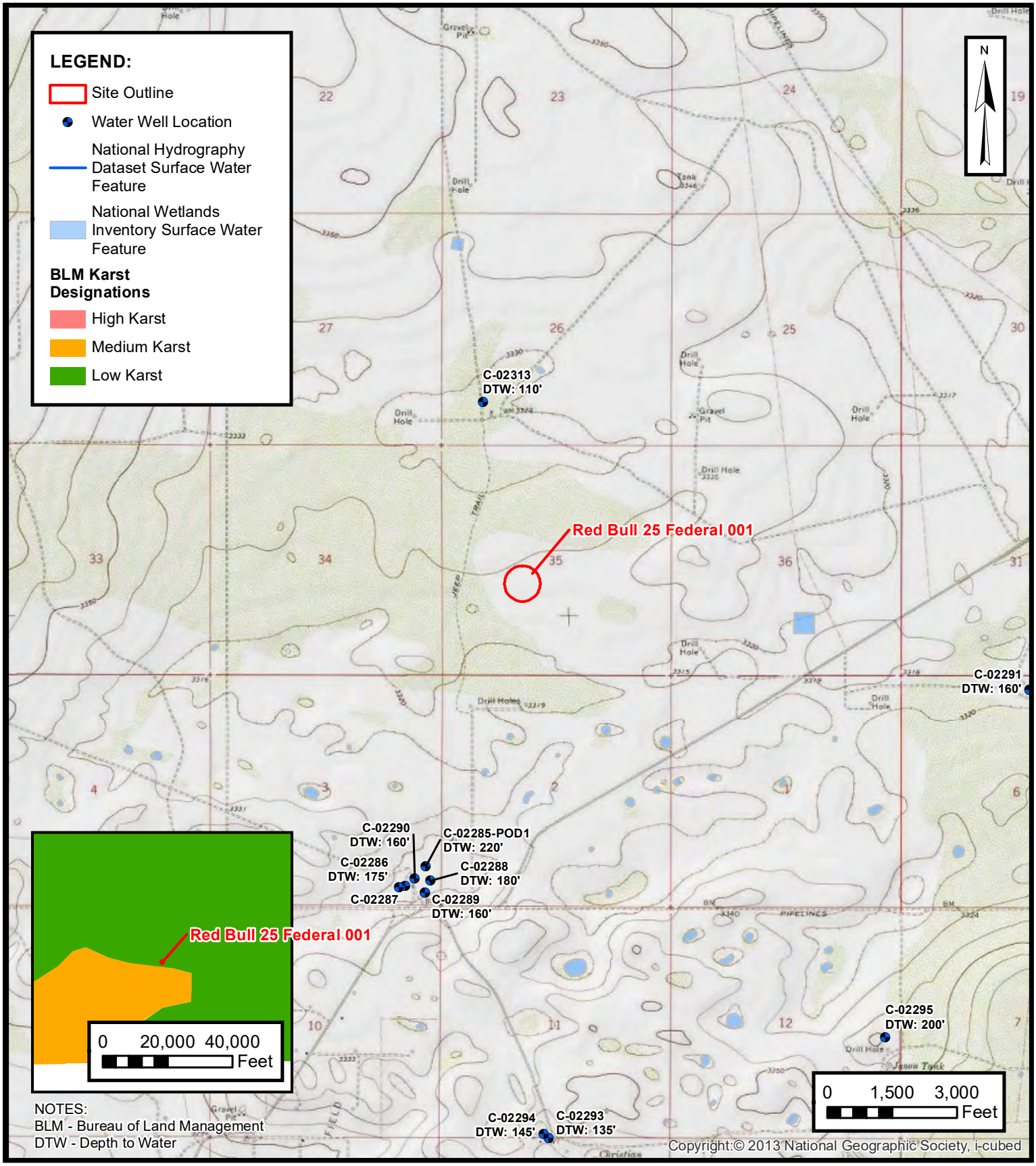
cc: Charles Beauvais, ConocoPhillips Company

Appendices:

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

ENSOLUM

FIGURES

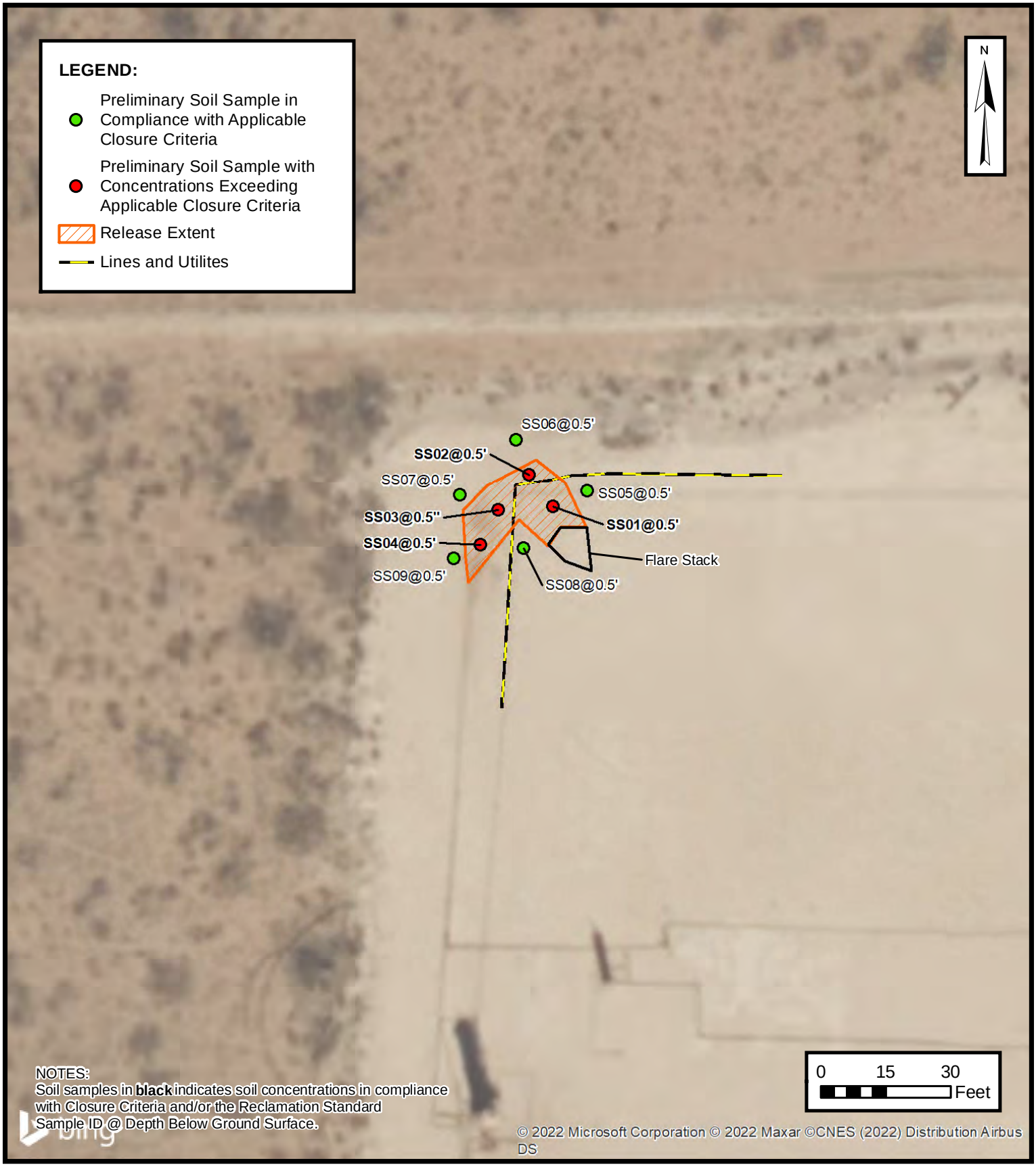


ENSOLUM
Environmental & Hydrogeologic Consultants

SITE RECEPTOR MAP

CONOCOPHILLIPS COMPANY
RED BULL 25 FEDERAL 001
NAPP2126444907
Unit K, Sec 35 T25S R33E
Lea County, New Mexico

FIGURE
1



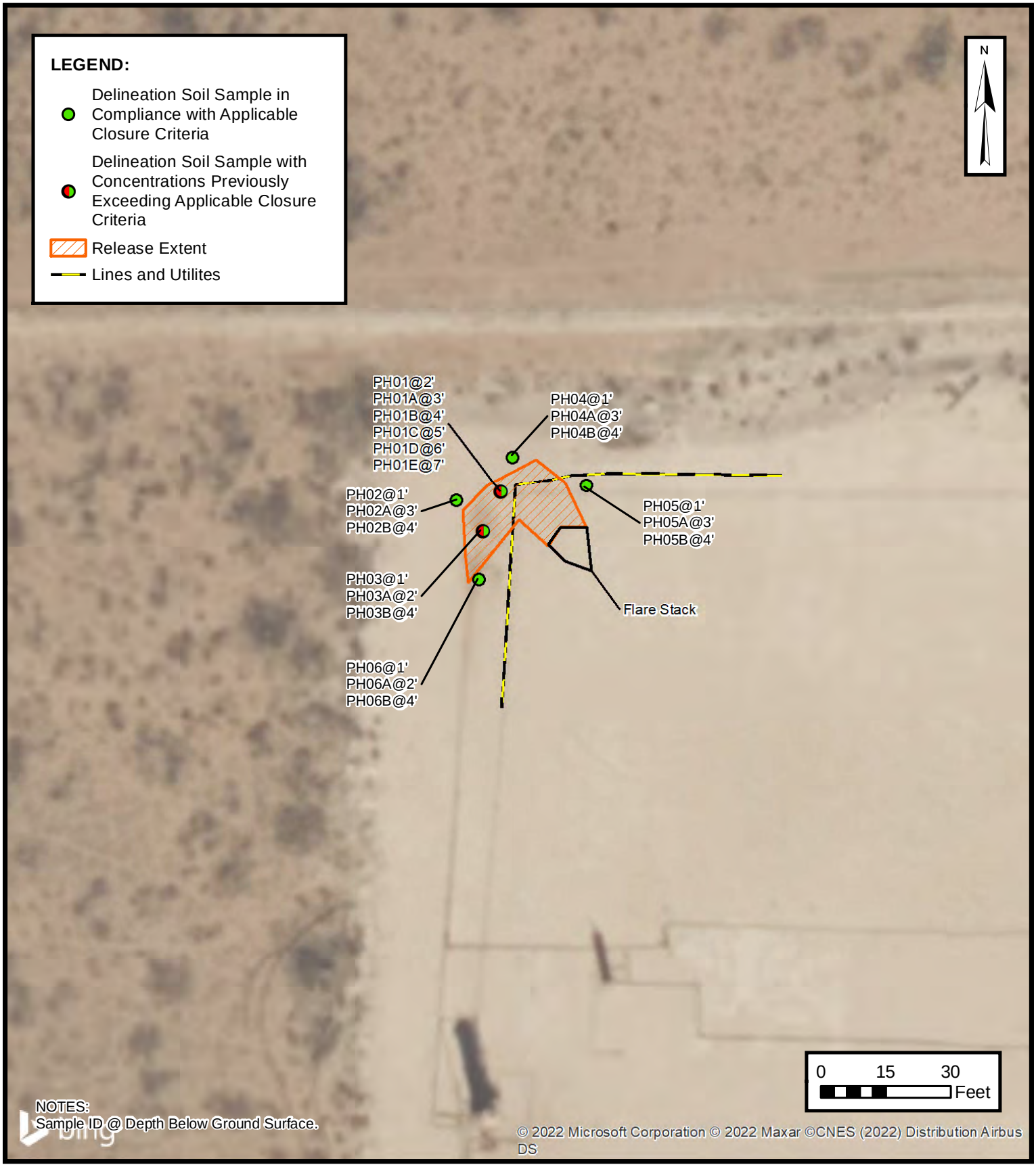
ENSOLUM
Environmental & Hydrogeologic Consultants

PRELIMINARY SOIL SAMPLE LOCATIONS

CONOCOPHILLIPS COMPANY
RED BULL 25 FEDERAL 001
NAPP2126444907
Unit K, Sec 35 T25S R33E
Lea County, New Mexico

FIGURE

2



ENSOLUM
Environmental & Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

CONOCOPHILLIPS COMPANY
RED BULL 25 FEDERAL 001
NAPP2126444907
Unit K, Sec 35 T25S R33E
Lea County, New Mexico

FIGURE
3

ENSOLUM

TABLES

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Red Bull 35 Federal 001
ConocoPhillips Company
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Assessment Soil Samples										
SS01	09/27/2021	0.5	<0.00199	<0.00200	<49.8	4,650	1,160	**4,650**	**5,810**	337
SS02	09/27/2021	0.5	<0.00198	<0.00200	<250	18,000	3,130	**18,000**	**21,100**	388
SS03	09/27/2021	0.5	<0.00200	<0.00200	251	19,800	3,060	**20,051**	**23,100**	198
SS04	09/27/2021	0.5	<0.00198	<0.00200	<250	17,200	3,890	**17,200**	**21,100**	247
SS05	09/27/2021	0.5	<.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	19.4
SS06	09/27/2021	0.5	<.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	18.7
SS07	10/20/2021	0.5	<.00200	0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	11.4
SS08	09/27/2021	0.5	<.00199	<.00199	<49.9	<49.9	<49.9	<49.9	<49.9	154
SS09	10/20/2021	0.5	<.00201	<.001402	<49.9	<49.9	<49.9	<49.9	<49.9	28.3
Delineation Soil Samples										
PH01	12/06/2021	2	0.328	0.982	2,380	1,050	<49.9	**3,430**	**3,430**	7,550
PH01A	12/06/2021	3	0.0102	0.221	<49.8	<49.8	<49.8	<49.8	<49.8	1,270
PH01B	12/06/2021	4	0.00584	0.0832	<49.9	<49.9	<49.9	<49.9	<49.9	888
PH01C	12/06/2021	5	0.00923	0.102	<49.9	131	<49.9	131	131	2,430
PH01D	12/06/2021	6	0.00332	0.0532	<50.0	<50.0	<50.0	<50.0	<50.0	912
PH01E	12/06/2021	7	0.00547	0.0666	<49.9	<49.9	<49.9	<49.9	<49.9	1,050
PH02	03/10/2022	1	<0.00200	<0.00399	<49.8	147	<49.8	147	147	769
PH02A	03/10/2022	3	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	384
PH02B	03/10/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	80.3
PH03	03/10/2022	1	<0.00200	<0.00400	<50.0	4,280	785	**4,280**	**5,070**	751
PH03A	03/10/2022	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	380
PH03B	03/10/2022	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	112
PH04	03/10/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	234
PH04A	03/10/2022	3	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	808
PH04B	03/10/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	368

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Red Bull 35 Federal 001
ConocoPhillips Company
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
PH05	03/10/2022	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	68.5
PH05A	03/10/2022	3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	206
PH05B	03/10/2022	4	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	29.1
PH06	03/10/2022	1	<0.00200	<0.00399	<49.9	84.3	<49.9	84.3	84.3	2,410
PH06A	03/10/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	15,500
PH06B	03/10/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	157

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

ENSOLUM

APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	C 02313	2	3	3	26	25S	33E	636971	3552098*

Driller License: **Driller Company:**

Driller Name: UNKNOWN

Drill Start Date: 01/01/1925 **Drill Finish Date:** 06/30/1925 **Plug Date:**

Log File Date: **PCW Rcv Date:** **Source:**

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 60 GPM

Casing Size: 6.88 **Depth Well:** 150 feet **Depth Water:** 110 feet

***UTM location was derived from PLSS - see Help**

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information | Geographic Area: United States | GO

Click to hideNews Bulletins

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

USGS 320407103331001 26S.33E.03.444110

Available data for this site SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°04'07", Longitude 103°33'10" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 180 feet
Land surface altitude: 3,311 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

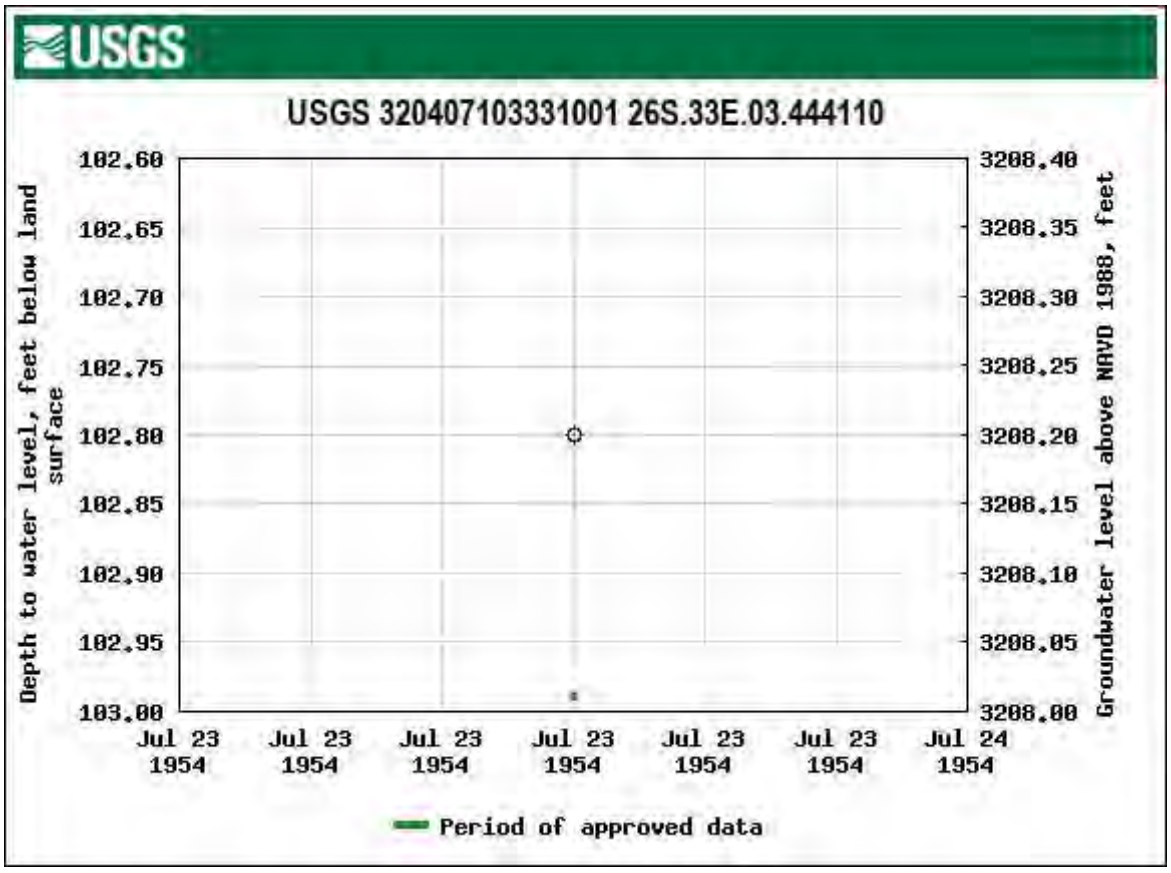
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1954-07-23	1954-07-23	1
Revisions	Unavailable (site:0) (timeseries:0)		

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?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms


USGS
USGS 320407103331001 26S.33E.03.444110
Depth to water level, feet below land surface
102.60
102.65
102.70
102.75
102.80
102.85
102.90
102.95
103.00
Groundwater level above NAVD 1988, feet
3208.40
3208.35
3208.30
3208.25
3208.20
3208.15
3208.10
3208.05
3208.00
Jul 23 1954
Jul 23 1954
Jul 23 1954
Jul 23 1954
Jul 23 1954
Jul 23 1954
Jul 24 1954
Period of approved data

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02285 **Subbasin:** CUB **Cross Reference:** -

Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING

Primary Status: DCL DECLARATION

Total Acres: 0 **Subfile:** - **Header:** -

Total Diversion: 3 **Cause/Case:** -

Owner: DINWIDDIE CATTLE CO.

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	464416	DCL	1993-02-02	DCL	PRC	C 02285	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02285 POD1		Shallow	1	4	4	03	26S	33E	636613	3548855	

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	
12/31/1982	DCL	0	3	C 02285 POD1	Shallow

Place of Use

Q 256	Q 64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
							0	3		PLS	12/31/1982	DCL	NO PLACE OF USE GIVEN.

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 02285 POD1	1	4	4	03	26S	33E	636613	3548855

Driller License:		**Driller Company:**			
Driller Name:					
Drill Start Date:		**Drill Finish Date:**	12/31/1982	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	18 GPM
Casing Size:	8.00	**Depth Well:**	220 feet	**Depth Water:**	220 feet

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
ConocoPhillips Company
Red Bull 35 Federal 001
Incident Number NAPP2126444907

Photograph 1 Date: 09/27/2021
Description: Photo of release extent taken during initial site assessment activities.

Photograph 2 Date: 12/06/2021
Description: Photo of PH01 taken during delineation activities.

Photograph 3 Date: 03/10/2022
Description: Photo of PH02 taken during delineation activities.

Photograph 4 Date: 03/10/2022
Description: Photo of PH03 taken during delineation activities.

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: **PH01**	Date: **03/10/2022**
	Site Name: **Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0855777, -103.5457797**	Hole Diameter: NA	Total Depth: **7'**

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	1,327	26.1	N			1	CHHE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, HC odor.
D	1,764	397.8	N	PH01	2	2	SP	SAND, abundant silt and caliche gravel, light brown, fine grain, no stain, strong HC odor.
D	2,480	154.3	N	PH01A	3	3	SP	SAA, reddish brown, less caliche gravel.
D	1,058	31	N	PH01B	4	4	SP	SAA, less HC odor.
D	498.4	86.1	N	PH01C	5	5	SP	SAA
D	498.4	58.4	N	PH01D	6	6	SP	SAA, more caliche gravel.
D	823.2	23.4	N	PH01E	7	7	CHHE	CALICHE, white-light tan, abundant red sand and gravel, poorly sorted, no stain, no odor.

TD @ 7 feet bgs

ENSOLUM

	Sample Name: **PH02**	Date: **03/10/2022**
	Site Name: **Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0855217, -103.5458256**	Hole Diameter: NA	Total Depth: **7'**

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	1,142.40	25.8	N	PH02	1	1	CHEE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, slight odor.
D	1,383.20	23	N			2	CHHE	SAA
D	823.2	5.4	N	PH02A	3	3	SP	SAND, reddish brown, abundant silt, some caliche gravel, fine grain, poorly sorted, no stain, no odor.
D	<168	0	N	PH02B	4	4	SP	SAA, less caliche gravel.
						5		
						6		
						7		

TD @ 4 feet bgs

ENSOLUM

	Sample Name: **PH03**	Date: **03//2022**
	Site Name: **Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0855135, -103.5457955**	Hole Diameter: NA	Total Depth: **5'**

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	1,428	85.3	N	PH03	1	1	CHHE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, HC odor.
D	2,161.60	23.5	N	PH03A	2	2	SP	SAND, light brown-tan, abundant silt and caliche gravel, fine grain, poorly sorted, no stain, slight odor.
D	683.2	11.6	N			3	SP	SAND, reddish brown, abundant silt, trace caliche gravel, fine grain, moderately sorted, no stain, no odor.
D	296.8	1.9	N	PH03B	4	4	SP	SAA

TD @ 4 feet bgs

ENSOLUM

	Sample Name: **PH04**	Date: **03/10/2022**
	Site Name: **Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0855053, -103.5457670**	Hole Diameter: NA	Total Depth: **5'**

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	392	0.4	N	PH04	1	1	CHHE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, HC odor.
D	750.4	0	N			2	CHHE	SAA
D	1,142	0	N	PH04A	3	3	SP	SAND, reddish brown, abundant silt, trace caliche gravel, fine grain, moderately sorted, no stain, no odor.
D	498	0	N	PH04B	4	4	SP	SAA, more caliche gravel.

TD @ 4 feet bgs

ENSOLUM

	Sample Name: **PH05**	Date: **03/10/2022**
	Site Name:**Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0855368, -103.5457079**	Hole Diameter: NA	Total Depth: **6'**

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	<168	1.4	N	PH05	1	1	CHHE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, no odor.
D	<168	0.9	N			2	CHHE	SAA
D	252	0.7	N	PH05A	3	3	SP	SAND, reddish brown, abundant silt, trace caliche gravel, fine grain, moderately sorted, no stain, no odor.
D	392	0.6	N	PH05B	4	4	SP	SAA, more caliche gravel.

TD @ 4 feet bgs

ENSOLUM

	Sample Name: **PH06**	Date: **03/10/2022**
	Site Name: **Red Bull 35 Federal 001**	
	Incident Number: **NAPP2126444907**	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: HG	Method: Backhoe
Coordinates: **32.0854629, -103.5458102**	Hole Diameter: NA	Total Depth: **5'**

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	2480	1.1	N	PH06	1	1	CHEE	CALICHE, light brown-tan, abundant sand and gravel, fine grain, poorly sorted, no stain, no odor.
D	2654	0	N	PH06A	2	2	CHHE	SAA
D	823.2	0	N			3	SP	SAND, reddish brown, abundant silt, trace caliche gravel, fine grain, moderately sorted, no stain, no odor.
D	252	0	N	PH06B	4	4	SP	SAA, more caliche gravel.

TD @ 4 feet bgs

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1700-1
Laboratory Sample Delivery Group: 31402909.170
Client Project/Site: Red Bull 35 Fed 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
12/15/2021 3:12:54 PM

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

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: Red Bull 35 Fed 1

Laboratory Job ID: 890-1700-1
SDG: 31402909.170

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1700-1
Project/Site: Red Bull 35 Fed 1 SDG: 31402909.170

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Job ID: 890-1700-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1700-1

Receipt
The sample was received on 12/13/2021 12:31 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

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: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Client Sample ID: PH01E

Date Collected: 12/06/21 14:20
Date Received: 12/13/21 12:31
Sample Depth: 7

Lab Sample ID: 890-1700-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00547**		0.00200		mg/Kg		12/14/21 10:00	12/14/21 20:03	1
Toluene	**0.0163**		0.00200		mg/Kg		12/14/21 10:00	12/14/21 20:03	1
Ethylbenzene	**0.00691**		0.00200		mg/Kg		12/14/21 10:00	12/14/21 20:03	1
m-Xylene & p-Xylene	**0.0268**		0.00401		mg/Kg		12/14/21 10:00	12/14/21 20:03	1
o-Xylene	**0.0111**		0.00200		mg/Kg		12/14/21 10:00	12/14/21 20:03	1
Xylenes, Total	**0.0379**		0.00401		mg/Kg		12/14/21 10:00	12/14/21 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*12/14/21 10:00*	*12/14/21 20:03*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/14/21 10:00*	*12/14/21 20:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0666**		0.00401		mg/Kg			12/15/21 14:22	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			12/13/21 12:32	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		12/14/21 14:49	12/14/21 21:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/14/21 14:49	12/14/21 21:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/14/21 14:49	12/14/21 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/14/21 14:49*	*12/14/21 21:57*	*1*
o-Terphenyl	*91*		*70 - 130*	*12/14/21 14:49*	*12/14/21 21:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1050**		5.00		mg/Kg			12/14/21 23:49	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1700-1
Project/Site: Red Bull 35 Fed 1 SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1699-A-1-A MS	Matrix Spike	103	99
890-1699-A-1-B MSD	Matrix Spike Duplicate	107	104
890-1700-1	PH01E	128	102
LCS 880-14660/1-A	Lab Control Sample	99	105
LCSD 880-14660/2-A	Lab Control Sample Dup	104	108
MB 880-14660/5-A	Method Blank	117	102

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1700-1	PH01E	98	91
890-1700-1 MS	PH01E	89	85
890-1700-1 MSD	PH01E	93	83

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-14782/2-A	Lab Control Sample	103	91
LCSD 880-14782/3-A	Lab Control Sample Dup	120	111
MB 880-14782/1-A	Method Blank	91	89

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14660/5-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14660

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*

Lab Sample ID: LCS 880-14660/1-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08602		mg/Kg		86	70 - 130		
Toluene			0.100	0.07927		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.07784		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1589		mg/Kg		79	70 - 130		
o-Xylene			0.100	0.07845		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-14660/2-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1000		mg/Kg		100	70 - 130	15	35
Toluene			0.100	0.09082		mg/Kg		91	70 - 130	14	35
Ethylbenzene			0.100	0.08966		mg/Kg		90	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1825		mg/Kg		91	70 - 130	14	35
o-Xylene			0.100	0.09067		mg/Kg		91	70 - 130	14	35

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0370		0.101	0.09777		mg/Kg					
Toluene	0.0642		0.101	0.09286		mg/Kg					

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	0.00482		0.101	0.09246		mg/Kg					
m-Xylene & p-Xylene	0.0144		0.201	0.1911		mg/Kg					
o-Xylene	0.00334		0.101	0.09407		mg/Kg					

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-1699-A-1-A MS
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-14782/1-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14782

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		12/14/21 14:49	12/14/21 20:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*

Lab Sample ID: LCS 880-14782/2-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14782

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	966.5		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

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

Lab Sample ID: LCSD 880-14782/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 14716 — **Prep Batch: 14782**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1015		mg/Kg		102	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	8	20

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

Lab Sample ID: 890-1700-1 MS — **Client Sample ID: PH01E**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 14716 — **Prep Batch: 14782**

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	997	899.8		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	917.4		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 890-1700-1 MSD — **Client Sample ID: PH01E**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 14716 — **Prep Batch: 14782**

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	999	902.0		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.2		mg/Kg		93	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14779/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 14808

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/14/21 20:56	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-14779/2-A
Matrix: Solid
Analysis Batch: 14808

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.1		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-14779/3-A
Matrix: Solid
Analysis Batch: 14808

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	267.8		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-9308-A-1-H MS
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	323.0	F1	mg/Kg		115	90 - 110		

Lab Sample ID: 880-9308-A-1-I MSD
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	318.0	F1	mg/Kg		113	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1700-1
Project/Site: Red Bull 35 Fed 1 SDG: 31402909.170

GC VOA

Prep Batch: 14660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	5035	
MB 880-14660/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 14700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	8021B	14660
MB 880-14660/5-A	Method Blank	Total/NA	Solid	8021B	14660
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	8021B	14660
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14660
890-1699-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	14660

Analysis Batch: 14874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 14652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	8015 NM	

Analysis Batch: 14716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	8015B NM	14782
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015B NM	14782
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14782
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14782
890-1700-1 MS	PH01E	Total/NA	Solid	8015B NM	14782
890-1700-1 MSD	PH01E	Total/NA	Solid	8015B NM	14782

Prep Batch: 14782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Total/NA	Solid	8015NM Prep	
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1700-1 MS	PH01E	Total/NA	Solid	8015NM Prep	
890-1700-1 MSD	PH01E	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 14779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Soluble	Solid	DI Leach	
MB 880-14779/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1700-1
Project/Site: Red Bull 35 Fed 1 SDG: 31402909.170

HPLC/IC (Continued)

Leach Batch: 14779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 14808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1700-1	PH01E	Soluble	Solid	300.0	14779
MB 880-14779/1-A	Method Blank	Soluble	Solid	300.0	14779
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	300.0	14779
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14779
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	14779
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14779

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Client Sample ID: PH01E

Date Collected: 12/06/21 14:20
Date Received: 12/13/21 12:31

Lab Sample ID: 890-1700-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14660	12/14/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14700	12/14/21 20:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14874	12/15/21 14:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14782	12/14/21 14:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14716	12/14/21 21:57	AJ	XEN MID
Soluble	Leach	DI Leach			14779	12/14/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1	14808	12/14/21 23:49	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: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

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. Job ID: 890-1700-1
Project/Site: Red Bull 35 Fed 1 SDG: 31402909.170

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed 1

Job ID: 890-1700-1
SDG: 31402909.170

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1700-1	PH01E	Solid	12/06/21 14:20	12/13/21 12:31	7

Chain of Custody

XENCO LABORATORIES

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)

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849 Email:		Elliot.Lee@wsp.com, Kalei.Jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Red Bull 35 Fed 1	Turn Around	
Project Number:	31402909.170	Routine ☐	
P.O. Number:		Rush: 3Day TAT	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2/3.0	Thermometer ID	TUM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

890-1700 Chain of Custody

Work Order Notes

Incident # NAPP2126444907

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH01E	S	12/6/2021	14:20	7'	1	X	X	X	Discrete

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

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12-13-21 1231	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1700-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Red Bull 35 Fed 1	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M Hexane
B NaOH	N None
C - Zn Acetate	O AsNaO2
D Nitric Acid	P - Na2O4S
E - NaHSO4	Q Na2SO3
F MeOH	R - Na2S2O3
G - Amchlor	S H2SO4
H Ascorbic Acid	T TSP Dodecahydrate
I - Ice	U Acetone
J DI Water	V - MCAA
K EDTA	W pH 4-5
L EDA	Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH03E (890-1700-1)	12/6/21	14 20 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Dee Asp 12-13-21	12/14/21 11:50		Patricia R		
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 3.1/3.2 .10 IR8

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1700-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Red Bull 35 Fed 1	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J DI Water, K EDTA, L - EDA, M Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V - MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH03E (890-1700-1)	12/6/21	14 20 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Dee Asp 12-13-21	12/14/21 11.50		Received by: Rebecca R		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3 | 3.2 .10 IR8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1700-1
SDG Number: 31402909.170

Login Number: 1700
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1700-1
SDG Number: 31402909.170

Login Number: 1700
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland
List Creation: 12/14/21 12:00 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1701-1
Laboratory Sample Delivery Group: 31402909.170
Client Project/Site: Red Bull 35 Fed1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
12/15/2021 3:12:54 PM

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

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: Red Bull 35 Fed1

Laboratory Job ID: 890-1701-1
SDG: 31402909.170

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1701-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Job ID: 890-1701-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1701-1

Receipt
The sample was received on 12/13/2021 12:31 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

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: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Client Sample ID: PH01D

Date Collected: 12/06/21 14:00
Date Received: 12/13/21 12:31
Sample Depth: 6

Lab Sample ID: 890-1701-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00332		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:24	1
Toluene	0.0130		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:24	1
Ethylbenzene	0.00394		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:24	1
m-Xylene & p-Xylene	0.0214		0.00396		mg/Kg		12/14/21 10:00	12/14/21 20:24	1
o-Xylene	0.0115		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:24	1
Xylenes, Total	0.0329		0.00396		mg/Kg		12/14/21 10:00	12/14/21 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*12/14/21 10:00*	*12/14/21 20:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/14/21 10:00*	*12/14/21 20:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0532		0.00396		mg/Kg			12/15/21 14:22	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			12/13/21 12:32	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		12/14/21 14:49	12/14/21 22:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 22:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*12/14/21 14:49*	*12/14/21 22:59*	*1*
o-Terphenyl	*90*		*70 - 130*	*12/14/21 14:49*	*12/14/21 22:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	912		5.01		mg/Kg			12/14/21 23:56	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1701-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1699-A-1-A MS	Matrix Spike	103	99
890-1699-A-1-B MSD	Matrix Spike Duplicate	107	104
890-1701-1	PH01D	142 S1+	102
LCS 880-14660/1-A	Lab Control Sample	99	105
LCSD 880-14660/2-A	Lab Control Sample Dup	104	108
MB 880-14660/5-A	Method Blank	117	102

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1700-A-1-G MS	Matrix Spike	89	85
890-1700-A-1-H MSD	Matrix Spike Duplicate	93	83
890-1701-1	PH01D	105	90

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-14782/2-A	Lab Control Sample	103	91
LCSD 880-14782/3-A	Lab Control Sample Dup	120	111
MB 880-14782/1-A	Method Blank	91	89

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14660/5-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14660

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*

Lab Sample ID: LCS 880-14660/1-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08602		mg/Kg		86	70 - 130		
Toluene			0.100	0.07927		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.07784		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1589		mg/Kg		79	70 - 130		
o-Xylene			0.100	0.07845		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-14660/2-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1000		mg/Kg		100	70 - 130	15	35
Toluene			0.100	0.09082		mg/Kg		91	70 - 130	14	35
Ethylbenzene			0.100	0.08966		mg/Kg		90	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1825		mg/Kg		91	70 - 130	14	35
o-Xylene			0.100	0.09067		mg/Kg		91	70 - 130	14	35

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0370		0.101	0.09777		mg/Kg					
Toluene	0.0642		0.101	0.09286		mg/Kg					

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	0.00482		0.101	0.09246		mg/Kg					
m-Xylene & p-Xylene	0.0144		0.201	0.1911		mg/Kg					
o-Xylene	0.00334		0.101	0.09407		mg/Kg					

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-1699-A-1-A MS
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-14782/1-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14782

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		12/14/21 14:49	12/14/21 20:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*

Lab Sample ID: LCS 880-14782/2-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14782

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	966.5		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

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

Lab Sample ID: LCSD 880-14782/3-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14782

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1015		mg/Kg		102	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	8	20

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

Lab Sample ID: 890-1700-A-1-G MS
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14782

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	997	899.8		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	917.4		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 890-1700-A-1-H MSD
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14782

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	999	902.0		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.2		mg/Kg		93	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14779/1-A
Matrix: Solid
Analysis Batch: 14808

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			12/14/21 20:56	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-14779/2-A
Matrix: Solid
Analysis Batch: 14808

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.1		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-14779/3-A
Matrix: Solid
Analysis Batch: 14808

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	267.8		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-9308-A-1-H MS
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	323.0	F1	mg/Kg		115	90 - 110		

Lab Sample ID: 880-9308-A-1-I MSD
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	318.0	F1	mg/Kg		113	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1701-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

GC VOA

Prep Batch: 14660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	5035	
MB 880-14660/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 14700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	8021B	14660
MB 880-14660/5-A	Method Blank	Total/NA	Solid	8021B	14660
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	8021B	14660
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14660
890-1699-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	14660

Analysis Batch: 14874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 14652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	8015 NM	

Analysis Batch: 14716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	8015B NM	14782
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015B NM	14782
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14782
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14782
890-1700-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	14782
890-1700-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14782

Prep Batch: 14782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Total/NA	Solid	8015NM Prep	
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1700-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1700-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 14779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Soluble	Solid	DI Leach	
MB 880-14779/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1701-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

HPLC/IC (Continued)

Leach Batch: 14779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 14808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1701-1	PH01D	Soluble	Solid	300.0	14779
MB 880-14779/1-A	Method Blank	Soluble	Solid	300.0	14779
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	300.0	14779
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14779
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	14779
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14779

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Client Sample ID: PH01D

Date Collected: 12/06/21 14:00
Date Received: 12/13/21 12:31

Lab Sample ID: 890-1701-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14660	12/14/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14700	12/14/21 20:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14874	12/15/21 14:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14782	12/14/21 14:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14716	12/14/21 22:59	AJ	XEN MID
Soluble	Leach	DI Leach			14779	12/14/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		1	14808	12/14/21 23:56	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: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

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. Job ID: 890-1701-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1701-1
SDG: 31402909.170

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1701-1	PH01D	Solid	12/06/21 14:00	12/13/21 12:31	6

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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)

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849 Email:	Email:	Elliot.Lee@wsp.com, Kalei.Jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Red Bull 35 Fed 1	Turn Around	
Project Number:	31402909.170	Routine ☐	
P.O. Number:		Rush: 3Day TAT	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2/3.0	Thermometer ID	TWM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

890-1701 Chain of Custody

Work Order Notes

Incident # NAPP2126444907

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH01D	S	12/6/2021	14:00	6'	1	X	X	X	Discrete

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

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Alee Cruz	12-13-21 1231	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1701-1
Address: 1211 W Florida Ave	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Red Bull 35 Fed1	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D - Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
ph01d (890-1701-1)	12/6/21	14 00 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Relinquished by: [signature] 12.13.21	Date/Time: 12/14/21 11:50	Company	Received by: [signature]	Date/Time:	Company
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 31/3.2 .10 IR8

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1701-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Red Bull 35 Fed1	Project #: 89000004			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
ph01d (890-1701-1)	12/6/21	14 00 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clee Cup 12.13.21	12/14/21 11:50		Patricia R		
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.	3.1/3.2 .10 IR8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1701-1
SDG Number: 31402909.170

Login Number: 1701
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1701-1
SDG Number: 31402909.170

Login Number: 1701
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland
List Creation: 12/14/21 12:00 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1702-1
Laboratory Sample Delivery Group: 31402909.170
Client Project/Site: Red Bull 35 Fed1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
12/15/2021 3:13:11 PM

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

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: Red Bull 35 Fed1

Laboratory Job ID: 890-1702-1
SDG: 31402909.170

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1702-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Job ID: 890-1702-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1702-1

Receipt
The sample was received on 12/13/2021 12:31 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

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: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Client Sample ID: PH01C

Date Collected: 12/06/21 13:55
Date Received: 12/13/21 12:31
Sample Depth: 5

Lab Sample ID: 890-1702-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00923		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:44	1
Toluene	0.0291		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:44	1
Ethylbenzene	0.00705		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:44	1
m-Xylene & p-Xylene	0.0384		0.00397		mg/Kg		12/14/21 10:00	12/14/21 20:44	1
o-Xylene	0.0187		0.00198		mg/Kg		12/14/21 10:00	12/14/21 20:44	1
Xylenes, Total	0.0571		0.00397		mg/Kg		12/14/21 10:00	12/14/21 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/14/21 10:00*	*12/14/21 20:44*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*12/14/21 10:00*	*12/14/21 20:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.102		0.00397		mg/Kg			12/15/21 14:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	131		49.9		mg/Kg			12/13/21 12:32	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		12/14/21 14:49	12/14/21 23:20	1
Diesel Range Organics (Over C10-C28)	131		49.9		mg/Kg		12/14/21 14:49	12/14/21 23:20	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/14/21 14:49	12/14/21 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/14/21 14:49*	*12/14/21 23:20*	*1*
o-Terphenyl	*86*		*70 - 130*	*12/14/21 14:49*	*12/14/21 23:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2430		49.5		mg/Kg			12/15/21 00:02	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1699-A-1-A MS	Matrix Spike	103	99
890-1699-A-1-B MSD	Matrix Spike Duplicate	107	104
890-1702-1	PH01C	111	110
LCS 880-14660/1-A	Lab Control Sample	99	105
LCSD 880-14660/2-A	Lab Control Sample Dup	104	108
MB 880-14660/5-A	Method Blank	117	102

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1700-A-1-G MS	Matrix Spike	89	85
890-1700-A-1-H MSD	Matrix Spike Duplicate	93	83
890-1702-1	PH01C	98	86

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-14782/2-A	Lab Control Sample	103	91
LCSD 880-14782/3-A	Lab Control Sample Dup	120	111
MB 880-14782/1-A	Method Blank	91	89

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14660/5-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14660

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/14/21 07:30	12/14/21 10:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/14/21 07:30	12/14/21 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/14/21 07:30*	*12/14/21 10:41*	*1*

Lab Sample ID: LCS 880-14660/1-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08602		mg/Kg		86	70 - 130		
Toluene			0.100	0.07927		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.07784		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1589		mg/Kg		79	70 - 130		
o-Xylene			0.100	0.07845		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-14660/2-A
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14660

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1000		mg/Kg		100	70 - 130	15	35
Toluene			0.100	0.09082		mg/Kg		91	70 - 130	14	35
Ethylbenzene			0.100	0.08966		mg/Kg		90	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1825		mg/Kg		91	70 - 130	14	35
o-Xylene			0.100	0.09067		mg/Kg		91	70 - 130	14	35

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0370		0.101	0.09777		mg/Kg					
Toluene	0.0642		0.101	0.09286		mg/Kg					

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

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

Lab Sample ID: 890-1699-A-1-B MSD
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	0.00482		0.101	0.09246		mg/Kg					
m-Xylene & p-Xylene	0.0144		0.201	0.1911		mg/Kg					
o-Xylene	0.00334		0.101	0.09407		mg/Kg					

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-1699-A-1-A MS
Matrix: Solid
Analysis Batch: 14700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-14782/1-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14782

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		12/14/21 14:49	12/14/21 20:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/21 14:49	12/14/21 20:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/14/21 14:49*	*12/14/21 20:54*	*1*

Lab Sample ID: LCS 880-14782/2-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14782

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	966.5		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

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

Lab Sample ID: LCSD 880-14782/3-A
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14782

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1015		mg/Kg		102	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	8	20

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

Lab Sample ID: 890-1700-A-1-G MS
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14782

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	997	899.8		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	917.4		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 890-1700-A-1-H MSD
Matrix: Solid
Analysis Batch: 14716

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14782

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	999	902.0		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.2		mg/Kg		93	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14779/1-A
Matrix: Solid
Analysis Batch: 14808

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			12/14/21 20:56	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-14779/2-A
Matrix: Solid
Analysis Batch: 14808

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.1		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-14779/3-A
Matrix: Solid
Analysis Batch: 14808

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	267.8		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-9308-A-1-H MS
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	323.0	F1	mg/Kg		115	90 - 110		

Lab Sample ID: 880-9308-A-1-I MSD
Matrix: Solid
Analysis Batch: 14808

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	38.7	F1	248	318.0	F1	mg/Kg		113	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1702-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

GC VOA

Prep Batch: 14660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	5035	
MB 880-14660/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 14700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	8021B	14660
MB 880-14660/5-A	Method Blank	Total/NA	Solid	8021B	14660
LCS 880-14660/1-A	Lab Control Sample	Total/NA	Solid	8021B	14660
LCSD 880-14660/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14660
890-1699-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1699-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	14660

Analysis Batch: 14874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 14652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	8015 NM	

Analysis Batch: 14716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	8015B NM	14782
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015B NM	14782
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14782
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14782
890-1700-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	14782
890-1700-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14782

Prep Batch: 14782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Total/NA	Solid	8015NM Prep	
MB 880-14782/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14782/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14782/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1700-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1700-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 14779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Soluble	Solid	DI Leach	
MB 880-14779/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1702-1
Project/Site: Red Bull 35 Fed1 SDG: 31402909.170

HPLC/IC (Continued)

Leach Batch: 14779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 14808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1702-1	PH01C	Soluble	Solid	300.0	14779
MB 880-14779/1-A	Method Blank	Soluble	Solid	300.0	14779
LCS 880-14779/2-A	Lab Control Sample	Soluble	Solid	300.0	14779
LCSD 880-14779/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14779
880-9308-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	14779
880-9308-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14779

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Client Sample ID: PH01C

Date Collected: 12/06/21 13:55
Date Received: 12/13/21 12:31

Lab Sample ID: 890-1702-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14660	12/14/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14700	12/14/21 20:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	14874	12/15/21 14:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	14652	12/13/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14782	12/14/21 14:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14716	12/14/21 23:20	AJ	XEN MID
Soluble	Leach	DI Leach			14779	12/14/21 12:39	CA	XEN MID
Soluble	Analysis	300.0		10	14808	12/15/21 00:02	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: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

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: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Fed1

Job ID: 890-1702-1
SDG: 31402909.170

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1702-1	PH01C	Solid	12/06/21 13:55	12/13/21 12:31	5

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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)

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849	Email:	Elliot.Lee@wsp.com, Kalei.Jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐

State of Project:

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

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Red Bull 35 Fed 1	Turn Around	
Project Number:	31402909.170	Routine ☐	
P.O. Number:		Rush: 3d TAT	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2/3.0	Thermometer ID	TWM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH01C	S	12/6/2021	13:55	5'	1	X	X	X

ANALYSIS REQUEST

890-1702 Chain of Custody

Work Order Notes

Incident # NAPP2126444907

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

Sample Comments

Discrete

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

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Cloe Cuff	12.13.21 1231	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1702-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Red Bull 35 Fed1	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH01C (890-1702-1)	12/6/21	13 55 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II, III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		3.1 / 3.2 .10 IR8

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-543 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1702-1
Address: 1211 W Florida Ave ,	Due Date Requested: 12/16/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Red Bull 35 Fed1	Project #: 89000004			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G - Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH01C (890-1702-1)	12/6/21	13 55 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time.	Method of Shipment:
Relinquished by: 12.13.21	Date/Time. 12/14/21 11.50	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3.1/3.2 .10 IR8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1702-1
SDG Number: 31402909.170

Login Number: 1702
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1702-1
SDG Number: 31402909.170

Login Number: 1702
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland
List Creation: 12/14/21 12:00 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12340-1
Laboratory Sample Delivery Group: 32.08518, -103,5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/28/2022 9:27:54 AM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

Job ID: 880-12340-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12340-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21733 and analytical batch 880-21907 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21363 and analytical batch 880-21518 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: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Client Sample ID: PH01

Date Collected: 03/10/22 10:00
Date Received: 03/11/22 11:23
Sample Depth: 1

Lab Sample ID: 880-12340-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 01:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 01:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 01:58	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/17/22 13:09	03/19/22 01:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 01:58	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/17/22 13:09	03/19/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/17/22 13:09*	*03/19/22 01:58*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*03/17/22 13:09*	*03/19/22 01:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/21/22 12:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**75.3**		49.8		mg/Kg			03/14/22 11:58	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		03/11/22 17:33	03/14/22 04:14	1
Diesel Range Organics (Over C10-C28)	**75.3**		49.8		mg/Kg		03/11/22 17:33	03/14/22 04:14	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/11/22 17:33	03/14/22 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:14*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1040**		49.7		mg/Kg			03/26/22 05:11	10

Client Sample ID: PH01A

Date Collected: 03/10/22 10:06
Date Received: 03/11/22 11:23
Sample Depth: 3

Lab Sample ID: 880-12340-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/19/22 02:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/19/22 02:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/19/22 02:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/17/22 13:09	03/19/22 02:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/19/22 02:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/17/22 13:09	03/19/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/19/22 02:19*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

Client Sample ID: PH01A
Lab Sample ID: 880-12340-2
Date Collected: 03/10/22 10:06
Matrix: Solid
Date Received: 03/11/22 11:23
Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/17/22 13:09*	*03/19/22 02:19*	*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			03/21/22 12:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**82.7**		50.0	mg/Kg			03/14/22 11:58	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		03/11/22 17:33	03/14/22 04:35	1
Diesel Range Organics (Over C10-C28)	**82.7**		50.0	mg/Kg		03/11/22 17:33	03/14/22 04:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 17:33	03/14/22 04:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*94*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:35*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1530**		49.5	mg/Kg			03/26/22 05:20	10

Client Sample ID: PH01B
Lab Sample ID: 880-12340-3
Date Collected: 03/10/22 10:15
Matrix: Solid
Date Received: 03/11/22 11:23
Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:09	03/19/22 02:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:09	03/19/22 02:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:09	03/19/22 02:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/17/22 13:09	03/19/22 02:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:09	03/19/22 02:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/17/22 13:09	03/19/22 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/17/22 13:09*	*03/19/22 02:40*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/17/22 13:09*	*03/19/22 02:40*	*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			03/21/22 12:50	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			03/14/22 11:58	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Client Sample ID: PH01B

Date Collected: 03/10/22 10:15
Date Received: 03/11/22 11:23
Sample Depth: 6

Lab Sample ID: 880-12340-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/11/22 17:33	03/14/22 04:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/11/22 17:33	03/14/22 04:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/11/22 17:33	03/14/22 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:55*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/11/22 17:33*	*03/14/22 04:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**396**		4.99		mg/Kg			03/26/22 05:29	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-12309-A-1-K MS	Matrix Spike	96	93										
880-12309-A-1-L MSD	Matrix Spike Duplicate	105	94										
880-12340-1	PH01	104	113										
880-12340-2	PH01A	103	114										
880-12340-3	PH01B	110	102										
LCS 880-21733/1-A	Lab Control Sample	97	105										
LCSD 880-21733/2-A	Lab Control Sample Dup	100	98										
MB 880-21733/5-A	Method Blank	103	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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-12340-1	PH01	98	110										
880-12340-2	PH01A	94	104										
880-12340-3	PH01B	110	123										
890-2054-A-1-D MS	Matrix Spike	89	91										
890-2054-A-1-E MSD	Matrix Spike Duplicate	71	69 S1-										

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)											
		1CO2	OTPH2										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
LCS 880-21363/2-A	Lab Control Sample	89	94										
LCSD 880-21363/3-A	Lab Control Sample Dup	107	120										
MB 880-21363/1-A	Method Blank	99	114										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21733/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21733

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*

Lab Sample ID: LCS 880-21733/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09847		mg/Kg		98	70 - 130		
Toluene			0.100	0.09238		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.09551		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1977		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21733/2-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08554		mg/Kg		86	70 - 130	14	35
Toluene			0.100	0.09210		mg/Kg		92	70 - 130	0	35
Ethylbenzene			0.100	0.09813		mg/Kg		98	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2075		mg/Kg		104	70 - 130	5	35
o-Xylene			0.100	0.1022		mg/Kg		102	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-12309-A-1-K MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.100	0.06063	F1	mg/Kg		61	70 - 130		
Toluene	<0.00200	U F1	0.100	0.06296	F1	mg/Kg		63	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

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

Lab Sample ID: 880-12309-A-1-K MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.100	0.06414	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1365	F1	mg/Kg		68	70 - 130
o-Xylene	<0.00200	U	0.100	0.06952		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-12309-A-1-L MSD
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06647	F1	mg/Kg		67	70 - 130	9	35
Toluene	<0.00200	U F1	0.0998	0.06842	F1	mg/Kg		69	70 - 130	8	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06932	F1	mg/Kg		69	70 - 130	8	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1472		mg/Kg		74	70 - 130	8	35
o-Xylene	<0.00200	U	0.0998	0.07573		mg/Kg		76	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 880-21363/1-A
Matrix: Solid
Analysis Batch: 21518

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21363

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		03/11/22 08:33	03/13/22 21:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/22 08:33	03/13/22 21:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 08:33	03/13/22 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/11/22 08:33*	*03/13/22 21:11*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/11/22 08:33*	*03/13/22 21:11*	*1*

Lab Sample ID: LCS 880-21363/2-A
Matrix: Solid
Analysis Batch: 21518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21363

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	925.1		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)			1000	832.3		mg/Kg		83	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

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

Lab Sample ID: LCS 880-21363/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-21363/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	982.0		mg/Kg		98	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	938.2		mg/Kg		94	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-2054-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	866.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	51.5	F1 F2	998	834.4		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-2054-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	674.5	F1 F2	mg/Kg		64	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	51.5	F1 F2	998	643.9	F1 F2	mg/Kg		59	70 - 130	26	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	69	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21603/1-A
Matrix: Solid
Analysis Batch: 22053

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/26/22 01:03	1

Lab Sample ID: LCS 880-21603/2-A
Matrix: Solid
Analysis Batch: 22053

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	239.4		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-21603/3-A
Matrix: Solid
Analysis Batch: 22053

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	241.6		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 880-12339-A-18-B MS
Matrix: Solid
Analysis Batch: 22053

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	452		248	680.4		mg/Kg		92	90 - 110		

Lab Sample ID: 880-12339-A-18-C MSD
Matrix: Solid
Analysis Batch: 22053

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	452		248	674.1		mg/Kg		90	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

GC VOA

Prep Batch: 21733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	5035	
880-12340-2	PH01A	Total/NA	Solid	5035	
880-12340-3	PH01B	Total/NA	Solid	5035	
MB 880-21733/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	5035	
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	8021B	21733
880-12340-2	PH01A	Total/NA	Solid	8021B	21733
880-12340-3	PH01B	Total/NA	Solid	8021B	21733
MB 880-21733/5-A	Method Blank	Total/NA	Solid	8021B	21733
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	8021B	21733
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21733
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	8021B	21733
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21733

Analysis Batch: 22055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	Total BTEX	
880-12340-2	PH01A	Total/NA	Solid	Total BTEX	
880-12340-3	PH01B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	8015NM Prep	
880-12340-2	PH01A	Total/NA	Solid	8015NM Prep	
880-12340-3	PH01B	Total/NA	Solid	8015NM Prep	
MB 880-21363/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21363/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2054-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	8015B NM	21363
880-12340-2	PH01A	Total/NA	Solid	8015B NM	21363
880-12340-3	PH01B	Total/NA	Solid	8015B NM	21363
MB 880-21363/1-A	Method Blank	Total/NA	Solid	8015B NM	21363
LCS 880-21363/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21363
LCSD 880-21363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21363
890-2054-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	21363
890-2054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21363

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

GC Semi VOA

Analysis Batch: 21527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Total/NA	Solid	8015 NM	
880-12340-2	PH01A	Total/NA	Solid	8015 NM	
880-12340-3	PH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Soluble	Solid	DI Leach	
880-12340-2	PH01A	Soluble	Solid	DI Leach	
880-12340-3	PH01B	Soluble	Solid	DI Leach	
MB 880-21603/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21603/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21603/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12339-A-18-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12339-A-18-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 22053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12340-1	PH01	Soluble	Solid	300.0	21603
880-12340-2	PH01A	Soluble	Solid	300.0	21603
880-12340-3	PH01B	Soluble	Solid	300.0	21603
MB 880-21603/1-A	Method Blank	Soluble	Solid	300.0	21603
LCS 880-21603/2-A	Lab Control Sample	Soluble	Solid	300.0	21603
LCSD 880-21603/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21603
880-12339-A-18-B MS	Matrix Spike	Soluble	Solid	300.0	21603
880-12339-A-18-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21603

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Client Sample ID: PH01

Date Collected: 03/10/22 10:00
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12340-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 01:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22055	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21527	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 04:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21603	03/15/22 08:35	CH	XEN MID
Soluble	Analysis	300.0		10			22053	03/26/22 05:11	CH	XEN MID

Client Sample ID: PH01A

Date Collected: 03/10/22 10:06
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12340-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 02:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22055	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21527	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 04:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21603	03/15/22 08:35	CH	XEN MID
Soluble	Analysis	300.0		10			22053	03/26/22 05:20	CH	XEN MID

Client Sample ID: PH01B

Date Collected: 03/10/22 10:15
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12340-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 02:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22055	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21527	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 04:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21603	03/15/22 08:35	CH	XEN MID
Soluble	Analysis	300.0		1			22053	03/26/22 05:29	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: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

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: 880-12340-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103,5452

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: Red Bull 35 Federal 001

Job ID: 880-12340-1
SDG: 32.08518, -103,5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12340-1	PH01	Solid	03/10/22 10:00	03/11/22 11:23	1
880-12340-2	PH01A	Solid	03/10/22 10:06	03/11/22 11:23	3
880-12340-3	PH01B	Solid	03/10/22 10:15	03/11/22 11:23	6

Chain of Custody

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

Work Order No: 12340

www.xenco.com Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level I ◯ Level II ☐ PST/USTT ☐ TRRP ☐ Level IV ☐
Deliverables EDD ◯ ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909 170	Routine	☒
Project Location	32 08518, -103 5452	Rush	☐
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #:			

SAMPLE RECEIPT			
Temp Blank.	Yes (No)	Wet Ice.	(Yes) No
Temperature (°C)	2.3/2.2	Thermometer ID	IR5
Received Intact:	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)	Sample Comments
PH01	SL	3-10-22	10:00	1	1	X	X	X	402
PH01A	↓	↓	10:06	3	↓	↓	↓	↓	
PH01B	↓	↓	10:15	6	↓	↓	↓	↓	

Preservative Codes

HNO3 HN
H2S04 H2
HCL HL
None NO
NaOH Na
MeOH Me
Zn Acetate+ NaOH Zn

TAT starts the day recevied by the lab if received by 4 30pm

880-12340 Chain of Custody

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

	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1	Hadlie Green		3/11/22 11:23	2		
3				4		
5				6		

Revised Date 101419 Rev 2019 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12340-1
SDG Number: 32.08518, -103,5452

Login Number: 12340
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12341-1
Laboratory Sample Delivery Group: 32.08518, -103.5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/21/2022 12:47:18 PM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Job ID: 880-12341-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12341-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21733 and analytical batch 880-21907 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21363 and analytical batch 880-21518 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: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Client Sample ID: PH02

Lab Sample ID: 880-12341-1
Matrix: Solid
Date Collected: 03/10/22 10:49
Date Received: 03/11/22 11:23
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		03/17/22 13:09	03/19/22 03:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 03:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 03:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/17/22 13:09	03/19/22 03:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 03:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/17/22 13:09	03/19/22 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:00*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:00*	*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			03/21/22 12:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**147**		49.8		mg/Kg			03/14/22 11:58	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		03/11/22 17:33	03/14/22 05:17	1
Diesel Range Organics (Over C10-C28)	**147**		49.8		mg/Kg		03/11/22 17:33	03/14/22 05:17	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/11/22 17:33	03/14/22 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:17*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**769**		5.04		mg/Kg			03/17/22 17:12	1

Client Sample ID: PH02A

Lab Sample ID: 880-12341-2
Matrix: Solid
Date Collected: 03/10/22 10:55
Date Received: 03/11/22 11:23
Sample Depth: - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 03:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 03:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 03:21	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/17/22 13:09	03/19/22 03:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 03:21	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/17/22 13:09	03/19/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:21*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Client Sample ID: PH02A

Date Collected: 03/10/22 10:55
Date Received: 03/11/22 11:23
Sample Depth: - 3

Lab Sample ID: 880-12341-2

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:21*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/21/22 12:50	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			03/14/22 11:58	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		03/11/22 17:33	03/14/22 05:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 17:33	03/14/22 05:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 17:33	03/14/22 05:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*102*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:38*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**384**		4.97	mg/Kg			03/17/22 17:21	1

Client Sample ID: PH02B

Date Collected: 03/10/22 10:58
Date Received: 03/11/22 11:23
Sample Depth: - 4

Lab Sample ID: 880-12341-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/17/22 13:09	03/19/22 03:42	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/17/22 13:09	03/19/22 03:42	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/17/22 13:09	03/19/22 03:42	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		03/17/22 13:09	03/19/22 03:42	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/17/22 13:09	03/19/22 03:42	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		03/17/22 13:09	03/19/22 03:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:42*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/17/22 13:09*	*03/19/22 03:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/21/22 12:50	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			03/14/22 11:58	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Client Sample ID: PH02B

Date Collected: 03/10/22 10:58
Date Received: 03/11/22 11:23
Sample Depth: - 4

Lab Sample ID: 880-12341-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/11/22 17:33	03/14/22 05:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/22 17:33	03/14/22 05:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 17:33	03/14/22 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:59*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/11/22 17:33*	*03/14/22 05:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.3**		4.96		mg/Kg			03/17/22 17:47	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12309-A-1-K MS	Matrix Spike	96	93
880-12309-A-1-L MSD	Matrix Spike Duplicate	105	94
880-12341-1	PH02	99	110
880-12341-2	PH02A	100	115
880-12341-3	PH02B	105	107
LCS 880-21733/1-A	Lab Control Sample	97	105
LCSD 880-21733/2-A	Lab Control Sample Dup	100	98
MB 880-21733/5-A	Method Blank	103	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12341-1	PH02	103	115
880-12341-2	PH02A	102	115
880-12341-3	PH02B	100	110
890-2054-A-1-D MS	Matrix Spike	89	91
890-2054-A-1-E MSD	Matrix Spike Duplicate	71	69 S1-

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-21363/2-A	Lab Control Sample	89	94
LCSD 880-21363/3-A	Lab Control Sample Dup	107	120
MB 880-21363/1-A	Method Blank	99	114

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21733/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21733

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*

Lab Sample ID: LCS 880-21733/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09847		mg/Kg		98	70 - 130		
Toluene			0.100	0.09238		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.09551		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1977		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21733/2-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08554		mg/Kg		86	70 - 130	14	35
Toluene			0.100	0.09210		mg/Kg		92	70 - 130	0	35
Ethylbenzene			0.100	0.09813		mg/Kg		98	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2075		mg/Kg		104	70 - 130	5	35
o-Xylene			0.100	0.1022		mg/Kg		102	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-12309-A-1-K MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.100	0.06063	F1	mg/Kg		61	70 - 130		
Toluene	<0.00200	U F1	0.100	0.06296	F1	mg/Kg		63	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12309-A-1-K MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.100	0.06414	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1365	F1	mg/Kg		68	70 - 130
o-Xylene	<0.00200	U	0.100	0.06952		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-12309-A-1-L MSD
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06647	F1	mg/Kg		67	70 - 130	9	35
Toluene	<0.00200	U F1	0.0998	0.06842	F1	mg/Kg		69	70 - 130	8	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06932	F1	mg/Kg		69	70 - 130	8	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1472		mg/Kg		74	70 - 130	8	35
o-Xylene	<0.00200	U	0.0998	0.07573		mg/Kg		76	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 880-21363/1-A
Matrix: Solid
Analysis Batch: 21518

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21363

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		03/11/22 08:33	03/13/22 21:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/22 08:33	03/13/22 21:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 08:33	03/13/22 21:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/11/22 08:33*	*03/13/22 21:11*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/11/22 08:33*	*03/13/22 21:11*	*1*

Lab Sample ID: LCS 880-21363/2-A
Matrix: Solid
Analysis Batch: 21518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21363

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	925.1		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)			1000	832.3		mg/Kg		83	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: LCS 880-21363/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-21363/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	982.0		mg/Kg		98	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	938.2		mg/Kg		94	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-2054-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	866.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	51.5	F1 F2	998	834.4		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-2054-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21518 **Prep Batch: 21363**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	674.5	F1 F2	mg/Kg		64	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	51.5	F1 F2	998	643.9	F1 F2	mg/Kg		59	70 - 130	26	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	69	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21722/1-A
Matrix: Solid
Analysis Batch: 21830

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/17/22 16:01	1

Lab Sample ID: LCS 880-21722/2-A
Matrix: Solid
Analysis Batch: 21830

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	227.6		mg/Kg		91	90 - 110		

Lab Sample ID: LCSD 880-21722/3-A
Matrix: Solid
Analysis Batch: 21830

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	250.2		mg/Kg		100	90 - 110	9	20

Lab Sample ID: 890-2077-A-1-F MS
Matrix: Solid
Analysis Batch: 21830

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	9.16		250	259.0		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2077-A-1-G MSD
Matrix: Solid
Analysis Batch: 21830

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	9.16		250	258.5		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC VOA

Prep Batch: 21733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	5035	
880-12341-2	PH02A	Total/NA	Solid	5035	
880-12341-3	PH02B	Total/NA	Solid	5035	
MB 880-21733/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	5035	
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	8021B	21733
880-12341-2	PH02A	Total/NA	Solid	8021B	21733
880-12341-3	PH02B	Total/NA	Solid	8021B	21733
MB 880-21733/5-A	Method Blank	Total/NA	Solid	8021B	21733
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	8021B	21733
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21733
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	8021B	21733
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21733

Analysis Batch: 22056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	Total BTEX	
880-12341-2	PH02A	Total/NA	Solid	Total BTEX	
880-12341-3	PH02B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	8015NM Prep	
880-12341-2	PH02A	Total/NA	Solid	8015NM Prep	
880-12341-3	PH02B	Total/NA	Solid	8015NM Prep	
MB 880-21363/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21363/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2054-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	8015B NM	21363
880-12341-2	PH02A	Total/NA	Solid	8015B NM	21363
880-12341-3	PH02B	Total/NA	Solid	8015B NM	21363
MB 880-21363/1-A	Method Blank	Total/NA	Solid	8015B NM	21363
LCS 880-21363/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21363
LCSD 880-21363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21363
890-2054-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	21363
890-2054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21363

QC Association Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

GC Semi VOA

Analysis Batch: 21528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Total/NA	Solid	8015 NM	
880-12341-2	PH02A	Total/NA	Solid	8015 NM	
880-12341-3	PH02B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Soluble	Solid	DI Leach	
880-12341-2	PH02A	Soluble	Solid	DI Leach	
880-12341-3	PH02B	Soluble	Solid	DI Leach	
MB 880-21722/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21722/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21722/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2077-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2077-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 21830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12341-1	PH02	Soluble	Solid	300.0	21722
880-12341-2	PH02A	Soluble	Solid	300.0	21722
880-12341-3	PH02B	Soluble	Solid	300.0	21722
MB 880-21722/1-A	Method Blank	Soluble	Solid	300.0	21722
LCS 880-21722/2-A	Lab Control Sample	Soluble	Solid	300.0	21722
LCSD 880-21722/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21722
890-2077-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	21722
890-2077-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21722

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Client Sample ID: PH02

Date Collected: 03/10/22 10:49
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12341-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 03:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22056	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21528	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 05:17	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/17/22 17:12	CH	XEN MID

Client Sample ID: PH02A

Date Collected: 03/10/22 10:55
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12341-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 03:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22056	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21528	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 05:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/17/22 17:21	CH	XEN MID

Client Sample ID: PH02B

Date Collected: 03/10/22 10:58
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12341-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 03:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22056	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21528	03/14/22 11:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21363	03/11/22 17:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21518	03/14/22 05:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/17/22 17:47	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. Job ID: 880-12341-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

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: Red Bull 35 Federal 001

Job ID: 880-12341-1
SDG: 32.08518, -103.5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12341-1	PH02	Solid	03/10/22 10:49	03/11/22 11:23	- 1
880-12341-2	PH02A	Solid	03/10/22 10:55	03/11/22 11:23	- 3
880-12341-3	PH02B	Solid	03/10/22 10:58	03/11/22 11:23	- 4

Chain of Custody

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

Work Order No: 12341

www.xenco.com Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level I ☐ Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909 170	Routine ☒	
Project Location	32 08518 -103 5452	Rush ☐	
Sampler's Name	Hadlie Green	Due Date 5 DAY	
PO #			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	2.3/2.2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

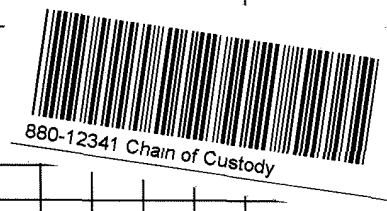
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)
PH02	SL	3-10-22	10:49	1	1	X	X	X
PH02A	↓	↓	10:55	3	↓	↓	↓	↓
PH02B	↓	↓	10:50	4	↓	↓	↓	↓

Preservative Codes

HNO3 HN
H2S04 H2
HCL HL
None NO
NaOH Na
MeOH Me
Zn Acetate+ NaOH Zn

TAT starts the day recevied 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 Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** Hg

	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1	Hadlie Green		3/11/22 11:23	2		
3				4		
5				6		

Revised Date 101419 Rev 2019 1

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12342-1
Laboratory Sample Delivery Group: 32.08518, -103.5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/21/2022 12:47:20 PM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Job ID: 880-12342-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12342-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21733 and analytical batch 880-21907 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-21661 and analytical batch 880-21675 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Client Sample ID: PH03

Date Collected: 03/10/22 11:40
Date Received: 03/11/22 11:23
Sample Depth: 1

Lab Sample ID: 880-12342-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 04:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 04:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 04:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/19/22 04:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/19/22 04:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/19/22 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:03*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:03*	*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			03/21/22 12:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5070**		50.0		mg/Kg			03/15/22 10:32	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 *1	50.0		mg/Kg		03/15/22 15:59	03/16/22 13:03	1
Diesel Range Organics (Over C10-C28)	**4280**		50.0		mg/Kg		03/15/22 15:59	03/16/22 13:03	1
Oil Range Organics (Over C28-C36)	**785**		50.0		mg/Kg		03/15/22 15:59	03/16/22 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/15/22 15:59*	*03/16/22 13:03*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/15/22 15:59*	*03/16/22 13:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**751**		4.99		mg/Kg			03/18/22 12:19	1

Client Sample ID: PH03A

Date Collected: 03/10/22 11:43
Date Received: 03/11/22 11:23
Sample Depth: 2

Lab Sample ID: 880-12342-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 04:23	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 04:23	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 04:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/17/22 13:09	03/19/22 04:23	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/19/22 04:23	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/17/22 13:09	03/19/22 04:23	1

Client Sample Results

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Client Sample ID: PH03A
Lab Sample ID: 880-12342-2
Date Collected: 03/10/22 11:43
Matrix: Solid
Date Received: 03/11/22 11:23
Sample Depth: 2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:23*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:23*	*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			03/21/22 12:50	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			03/15/22 10:32	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		03/14/22 08:47	03/14/22 19:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/14/22 08:47	03/14/22 19:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 08:47	03/14/22 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*91*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:05*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**		4.98	mg/Kg			03/18/22 12:28	1

Client Sample ID: PH03B
Lab Sample ID: 880-12342-3
Date Collected: 03/10/22 11:48
Matrix: Solid
Date Received: 03/11/22 11:23
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/17/22 13:09	03/19/22 04:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/17/22 13:09	03/19/22 04:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/17/22 13:09	03/19/22 04:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/17/22 13:09	03/19/22 04:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/17/22 13:09	03/19/22 04:44	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/17/22 13:09	03/19/22 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:44*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/17/22 13:09*	*03/19/22 04:44*	*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			03/21/22 12:50	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			03/15/22 10:32	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Client Sample ID: PH03B
Date Collected: 03/10/22 11:48
Date Received: 03/11/22 11:23
Sample Depth: 4

Lab Sample ID: 880-12342-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 08:47	03/14/22 19:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/22 08:47	03/14/22 19:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 08:47	03/14/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:26*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**112**		4.95		mg/Kg			03/17/22 18:14	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12309-A-1-K MS	Matrix Spike	96	93
880-12309-A-1-L MSD	Matrix Spike Duplicate	105	94
880-12342-1	PH03	95	106
880-12342-2	PH03A	90	111
880-12342-3	PH03B	102	107
LCS 880-21733/1-A	Lab Control Sample	97	105
LCSD 880-21733/2-A	Lab Control Sample Dup	100	98
MB 880-21733/5-A	Method Blank	103	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12342-1	PH03	107	107
880-12342-2	PH03A	91	106
880-12342-3	PH03B	87	93
880-12428-A-2-B MS	Matrix Spike	99	86
880-12428-A-2-C MSD	Matrix Spike Duplicate	106	98
890-2059-A-1-F MS	Matrix Spike	83	86
890-2059-A-1-G MSD	Matrix Spike Duplicate	82	85
LCS 880-21661/2-A	Lab Control Sample	128	130
LCSD 880-21661/3-A	Lab Control Sample Dup	103	106
MB 880-21661/1-A	Method Blank	120	126

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-21476/2-A	Lab Control Sample	96	107
LCSD 880-21476/3-A	Lab Control Sample Dup	102	116
MB 880-21476/1-A	Method Blank	98	117

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21733/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21733

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*

Lab Sample ID: LCS 880-21733/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09847		mg/Kg		98	70 - 130		
Toluene			0.100	0.09238		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.09551		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1977		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21733/2-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08554		mg/Kg		86	70 - 130	14	35
Toluene			0.100	0.09210		mg/Kg		92	70 - 130	0	35
Ethylbenzene			0.100	0.09813		mg/Kg		98	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2075		mg/Kg		104	70 - 130	5	35
o-Xylene			0.100	0.1022		mg/Kg		102	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-12309-A-1-K MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.100	0.06063	F1	mg/Kg		61	70 - 130		
Toluene	<0.00200	U F1	0.100	0.06296	F1	mg/Kg		63	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12309-A-1-K MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21907 **Prep Batch: 21733**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.100	0.06414	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1365	F1	mg/Kg		68	70 - 130
o-Xylene	<0.00200	U	0.100	0.06952		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-12309-A-1-L MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21907 **Prep Batch: 21733**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06647	F1	mg/Kg		67	70 - 130	9	35
Toluene	<0.00200	U F1	0.0998	0.06842	F1	mg/Kg		69	70 - 130	8	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06932	F1	mg/Kg		69	70 - 130	8	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1472		mg/Kg		74	70 - 130	8	35
o-Xylene	<0.00200	U	0.0998	0.07573		mg/Kg		76	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 880-21476/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21460 **Prep Batch: 21476**

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		03/14/22 08:47	03/14/22 11:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 11:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/14/22 08:47*	*03/14/22 11:00*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/14/22 08:47*	*03/14/22 11:00*	*1*

Lab Sample ID: LCS 880-21476/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21460 **Prep Batch: 21476**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	976.8		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)			1000	925.3		mg/Kg		93	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: LCS 880-21476/2-A
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21476

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-21476/3-A
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21476

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	964.6		mg/Kg		96	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	898.5		mg/Kg		90	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: 890-2059-A-1-F MS
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21476

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	942.6		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	879.2		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-2059-A-1-G MSD
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21476

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	998	927.2		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	865.3		mg/Kg		84	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	85		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: MB 880-21661/1-A
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21661

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		03/15/22 15:59	03/16/22 11:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/22 15:59	03/16/22 11:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/22 15:59	03/16/22 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*03/15/22 15:59*	*03/16/22 11:01*	*1*
o-Terphenyl	*126*		*70 - 130*	*03/15/22 15:59*	*03/16/22 11:01*	*1*

Lab Sample ID: LCS 880-21661/2-A
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21661

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	1216		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*130*		*70 - 130*

Lab Sample ID: LCSD 880-21661/3-A
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21661

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	822.8	*1	mg/Kg		82	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	1037		mg/Kg		104	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: 880-12428-A-2-B MS
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21661

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 *1	998	1019		mg/Kg		102	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	942.4		mg/Kg		94	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12428-A-2-B MS
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21661

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 880-12428-A-2-C MSD
Matrix: Solid
Analysis Batch: 21675

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21661

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 *1	999	1005		mg/Kg		101	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1070		mg/Kg		107	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	98		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21722/1-A
Matrix: Solid
Analysis Batch: 21830

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/17/22 16:01	1

Lab Sample ID: LCS 880-21722/2-A
Matrix: Solid
Analysis Batch: 21830

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	227.6		mg/Kg		91	90 - 110		

Lab Sample ID: LCSD 880-21722/3-A
Matrix: Solid
Analysis Batch: 21830

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	250.2		mg/Kg		100	90 - 110	9	20

Lab Sample ID: 880-12339-A-8-B MS
Matrix: Solid
Analysis Batch: 21830

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	1610		1240	2883		mg/Kg		103	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-12339-A-8-C MSD
Matrix: Solid
Analysis Batch: 21830

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	1610		1240	2889		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-2077-A-1-F MS
Matrix: Solid
Analysis Batch: 21830

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	9.16		250	259.0		mg/Kg		100	90 - 110

Lab Sample ID: 890-2077-A-1-G MSD
Matrix: Solid
Analysis Batch: 21830

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	9.16		250	258.5		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC VOA

Prep Batch: 21733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	5035	
880-12342-2	PH03A	Total/NA	Solid	5035	
880-12342-3	PH03B	Total/NA	Solid	5035	
MB 880-21733/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	5035	
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	8021B	21733
880-12342-2	PH03A	Total/NA	Solid	8021B	21733
880-12342-3	PH03B	Total/NA	Solid	8021B	21733
MB 880-21733/5-A	Method Blank	Total/NA	Solid	8021B	21733
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	8021B	21733
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21733
880-12309-A-1-K MS	Matrix Spike	Total/NA	Solid	8021B	21733
880-12309-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21733

Analysis Batch: 22057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	Total BTEX	
880-12342-2	PH03A	Total/NA	Solid	Total BTEX	
880-12342-3	PH03B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 21460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-2	PH03A	Total/NA	Solid	8015B NM	21476
880-12342-3	PH03B	Total/NA	Solid	8015B NM	21476
MB 880-21476/1-A	Method Blank	Total/NA	Solid	8015B NM	21476
LCS 880-21476/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21476
LCSD 880-21476/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21476
890-2059-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	21476
890-2059-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21476

Prep Batch: 21476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-2	PH03A	Total/NA	Solid	8015NM Prep	
880-12342-3	PH03B	Total/NA	Solid	8015NM Prep	
MB 880-21476/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21476/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21476/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2059-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2059-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12342-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC Semi VOA (Continued)

Analysis Batch: 21629 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-2	PH03A	Total/NA	Solid	8015 NM	
880-12342-3	PH03B	Total/NA	Solid	8015 NM	

Prep Batch: 21661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	8015NM Prep	
MB 880-21661/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21661/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21661/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12428-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12428-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Total/NA	Solid	8015B NM	21661
MB 880-21661/1-A	Method Blank	Total/NA	Solid	8015B NM	21661
LCS 880-21661/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21661
LCSD 880-21661/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21661
880-12428-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21661
880-12428-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21661

HPLC/IC

Leach Batch: 21722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Soluble	Solid	DI Leach	
880-12342-2	PH03A	Soluble	Solid	DI Leach	
880-12342-3	PH03B	Soluble	Solid	DI Leach	
MB 880-21722/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21722/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21722/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12339-A-8-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12339-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2077-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2077-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 21830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12342-1	PH03	Soluble	Solid	300.0	21722
880-12342-2	PH03A	Soluble	Solid	300.0	21722
880-12342-3	PH03B	Soluble	Solid	300.0	21722
MB 880-21722/1-A	Method Blank	Soluble	Solid	300.0	21722
LCS 880-21722/2-A	Lab Control Sample	Soluble	Solid	300.0	21722
LCSD 880-21722/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21722
880-12339-A-8-B MS	Matrix Spike	Soluble	Solid	300.0	21722
880-12339-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21722
890-2077-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	21722
890-2077-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21722

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Client Sample ID: PH03

Date Collected: 03/10/22 11:40
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12342-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 04:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22057	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21629	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21661	03/15/22 15:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21675	03/16/22 13:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/18/22 12:19	CH	XEN MID

Client Sample ID: PH03A

Date Collected: 03/10/22 11:43
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12342-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 04:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22057	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21629	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21476	03/14/22 08:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21460	03/14/22 19:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/18/22 12:28	CH	XEN MID

Client Sample ID: PH03B

Date Collected: 03/10/22 11:48
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12342-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 04:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22057	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21629	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21476	03/14/22 08:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21460	03/14/22 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21722	03/16/22 12:10	CH	XEN MID
Soluble	Analysis	300.0		1			21830	03/17/22 18:14	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: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

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: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

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: Red Bull 35 Federal 001

Job ID: 880-12342-1
SDG: 32.08518, -103.5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12342-1	PH03	Solid	03/10/22 11:40	03/11/22 11:23	1
880-12342-2	PH03A	Solid	03/10/22 11:43	03/11/22 11:23	2
880-12342-3	PH03B	Solid	03/10/22 11:48	03/11/22 11:23	4

Chain of Custody

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

Work Order No: 12342

www xenco com Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level (I) Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables EDD (EDD) ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909 170	Routine	☒
Project Location	32 08518, -103 5452	Rush	☐
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #			

SAMPLE RECEIPT			
Temp Blank.	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	2.3 / 2.2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)
PH03	SL	3-10-22	11:40	1	1	X	X	X
PH03A	↓	↓	11:43	2	↓	↓	↓	↓
PH03B	↓	↓	11:46	4	↓	↓	↓	↓

Preservative Codes

HNO3 HN
H2S04 H2
HCL HL
None NO
NaOH Na
MeOH Me
Zn Acetate+ NaOH Zn

TAT starts the day recevied by the lab if received by 4.30pm

Sample Comments

880-12342 Chain of Custody

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Hadlie Green		3/11/22 11:23	2		
3			4		
5			6		

Revised Date101419 Rev 2019 1

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12343-1
Laboratory Sample Delivery Group: 32.081518, -103.5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/29/2022 9:07:33 AM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

Job ID: 880-12343-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12343-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°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. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

Client Sample ID: PH04
Lab Sample ID: 880-12343-1
Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/11/22 11:23
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		03/23/22 13:50	03/24/22 01:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/23/22 13:50	03/24/22 01:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/23/22 13:50	03/24/22 01:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/23/22 13:50	03/24/22 01:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/23/22 13:50	03/24/22 01:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/23/22 13:50	03/24/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/23/22 13:50*	*03/24/22 01:58*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/23/22 13:50*	*03/24/22 01:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/22/22 16:47	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			03/15/22 10:32	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		03/14/22 08:47	03/14/22 19:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:47	03/14/22 19:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:47	03/14/22 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:47*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/14/22 08:47*	*03/14/22 19:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**234**		9.96		mg/Kg		03/26/22 22:57	03/27/22 17:04	1

Client Sample ID: PH04A
Lab Sample ID: 880-12343-2
Date Collected: 03/10/22 13:15 **Matrix: Solid**
Date Received: 03/11/22 11:23
Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/23/22 13:50	03/24/22 02:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/23/22 13:50	03/24/22 02:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/23/22 13:50	03/24/22 02:19	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/23/22 13:50	03/24/22 02:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/23/22 13:50	03/24/22 02:19	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/23/22 13:50	03/24/22 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/23/22 13:50*	*03/24/22 02:19*	*1*

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Client Sample ID: PH04A

Lab Sample ID: 880-12343-2
Matrix: Solid
Date Collected: 03/10/22 13:15
Date Received: 03/11/22 11:23
Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/23/22 13:50*	*03/24/22 02:19*	*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			03/22/22 16:47	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			03/15/22 10:32	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		03/14/22 08:47	03/14/22 20:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/14/22 08:47	03/14/22 20:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/14/22 08:47	03/14/22 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*88*		*70 - 130*	*03/14/22 08:47*	*03/14/22 20:07*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/14/22 08:47*	*03/14/22 20:07*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**808**		9.82	mg/Kg		03/26/22 22:57	03/27/22 17:16	1

Client Sample ID: PH04B

Lab Sample ID: 880-12343-3
Matrix: Solid
Date Collected: 03/10/22 13:18
Date Received: 03/11/22 11:23
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 16:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 16:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 16:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/18/22 16:00	03/21/22 16:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 16:37	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/18/22 16:00	03/21/22 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/18/22 16:00*	*03/21/22 16:37*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*03/18/22 16:00*	*03/21/22 16:37*	*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			03/22/22 16:47	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			03/15/22 10:32	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Client Sample ID: PH04B

Date Collected: 03/10/22 13:18
Date Received: 03/11/22 11:23
Sample Depth: 4

Lab Sample ID: 880-12343-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 20:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 20:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/14/22 08:47*	*03/14/22 20:28*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/14/22 08:47*	*03/14/22 20:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**368**		9.84		mg/Kg		03/26/22 22:57	03/27/22 17:51	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12325-A-4-J MS	Matrix Spike	101	99
880-12325-A-4-K MSD	Matrix Spike Duplicate	106	90
880-12343-1	PH04	105	109
880-12343-2	PH04A	104	108
880-12343-3	PH04B	107	118
890-2098-A-1-O MS	Matrix Spike	101	110
890-2098-A-1-P MSD	Matrix Spike Duplicate	101	111
LCS 880-21817/1-A	Lab Control Sample	92	103
LCS 880-22141/1-A	Lab Control Sample	103	110
LCSD 880-21817/2-A	Lab Control Sample Dup	102	108
LCSD 880-22141/2-A	Lab Control Sample Dup	101	110
MB 880-21817/5-A	Method Blank	107	100
MB 880-21854/5-B	Method Blank	103	104
MB 880-22141/5-A	Method Blank	103	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12343-1	PH04	93	106
880-12343-2	PH04A	88	104
880-12343-3	PH04B	91	100
890-2059-A-1-F MS	Matrix Spike	83	86
890-2059-A-1-G MSD	Matrix Spike Duplicate	82	85

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)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-21476/2-A	Lab Control Sample	96	107
LCSD 880-21476/3-A	Lab Control Sample Dup	102	116
MB 880-21476/1-A	Method Blank	98	117

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21817/5-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21817

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 16:00	03/21/22 13:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:50*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:50*	*1*

Lab Sample ID: LCS 880-21817/1-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21817

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09138		mg/Kg		91	70 - 130		
Toluene			0.100	0.08468		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08831		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1854		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09262		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21817/2-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21817

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09682		mg/Kg		97	70 - 130	6	35
Toluene			0.100	0.08844		mg/Kg		88	70 - 130	4	35
Ethylbenzene			0.100	0.09875		mg/Kg		99	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2008		mg/Kg		100	70 - 130	8	35
o-Xylene			0.100	0.1002		mg/Kg		100	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-12325-A-4-J MS
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.0990	0.1063		mg/Kg		107	70 - 130		
Toluene	<0.00198	U	0.0990	0.09861		mg/Kg		100	70 - 130		

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

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

Lab Sample ID: 880-12325-A-4-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21979 — **Prep Batch: 21817**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U	0.0990	0.1009		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.198	0.2149		mg/Kg		108	70 - 130
o-Xylene	0.00526		0.0990	0.1071		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-12325-A-4-K MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21979 — **Prep Batch: 21817**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0996	0.09278		mg/Kg		93	70 - 130	14	35
Toluene	<0.00198	U	0.0996	0.1022		mg/Kg		103	70 - 130	4	35
Ethylbenzene	<0.00198	U	0.0996	0.1122		mg/Kg		113	70 - 130	11	35
m-Xylene & p-Xylene	<0.00396	U	0.199	0.2449		mg/Kg		122	70 - 130	13	35
o-Xylene	0.00526		0.0996	0.1206		mg/Kg		116	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: MB 880-21854/5-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22183 — **Prep Batch: 21854**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/23/22 07:30*	*03/23/22 11:59*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/23/22 07:30*	*03/23/22 11:59*	*1*

Lab Sample ID: MB 880-22141/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22183 — **Prep Batch: 22141**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/22 13:50	03/23/22 22:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/22 13:50	03/23/22 22:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/22 13:50	03/23/22 22:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/22 13:50	03/23/22 22:53	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

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

Lab Sample ID: MB 880-22141/5-A
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22141

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/23/22 13:50	03/23/22 22:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/23/22 13:50	03/23/22 22:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/23/22 13:50*	*03/23/22 22:53*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/23/22 13:50*	*03/23/22 22:53*	*1*

Lab Sample ID: LCS 880-22141/1-A
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22141

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09514		mg/Kg		95	70 - 130		
Toluene			0.100	0.09412		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09619		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.1977		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.1012		mg/Kg		101	70 - 130		

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

Lab Sample ID: LCSD 880-22141/2-A
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22141

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09001		mg/Kg		90	70 - 130	6	35
Toluene			0.100	0.08892		mg/Kg		89	70 - 130	6	35
Ethylbenzene			0.100	0.09086		mg/Kg		91	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1872		mg/Kg		94	70 - 130	5	35
o-Xylene			0.100	0.09392		mg/Kg		94	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-2098-A-1-O MS
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 22141

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.100	0.08985		mg/Kg		89	70 - 130		
Toluene	<0.00199	U	0.100	0.08664		mg/Kg		85	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.08545		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1746		mg/Kg		86	70 - 130		
o-Xylene	<0.00199	U	0.100	0.08938		mg/Kg		89	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

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

Lab Sample ID: 890-2098-A-1-O MS
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 22141

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-2098-A-1-P MSD
Matrix: Solid
Analysis Batch: 22183

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 22141

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.09469		mg/Kg		95	70 - 130	5	35
Toluene	<0.00199	U	0.0990	0.09404		mg/Kg		94	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0990	0.09629		mg/Kg		97	70 - 130	12	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1984		mg/Kg		99	70 - 130	13	35
o-Xylene	<0.00199	U	0.0990	0.1001		mg/Kg		101	70 - 130	11	35

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

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

Lab Sample ID: MB 880-21476/1-A
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21476

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		03/14/22 08:47	03/14/22 11:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 11:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:47	03/14/22 11:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*98*		*70 - 130*	*03/14/22 08:47*	*03/14/22 11:00*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/14/22 08:47*	*03/14/22 11:00*	*1*

Lab Sample ID: LCS 880-21476/2-A
Matrix: Solid
Analysis Batch: 21460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21476

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	976.8		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	925.3		mg/Kg		93	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	*96*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

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

Lab Sample ID: LCSD 880-21476/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21460 **Prep Batch: 21476**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	964.6		mg/Kg		96	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	898.5		mg/Kg		90	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 890-2059-A-1-F MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21460 **Prep Batch: 21476**

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	942.6		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	879.2		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*83*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Lab Sample ID: 890-2059-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21460 **Prep Batch: 21476**

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	998	927.2		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	865.3		mg/Kg		84	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-46539/28-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/22 22:57	03/27/22 13:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-46539/29-A
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46539

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	95.01		mg/Kg		95	80 - 120		

Lab Sample ID: LCSD 860-46539/30-A
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46539

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	96.44		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 880-12338-A-3-C MS
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	458		100	666.8	4	mg/Kg		208	80 - 120		

Lab Sample ID: 880-12338-A-3-D MSD
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	458		102	683.2	4	mg/Kg		221	80 - 120	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

GC VOA

Prep Batch: 21817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-3	PH04B	Total/NA	Solid	5035	
MB 880-21817/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21817/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21817/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12325-A-4-J MS	Matrix Spike	Total/NA	Solid	5035	
880-12325-A-4-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 21854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21854/5-B	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 21979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-3	PH04B	Total/NA	Solid	8021B	21817
MB 880-21817/5-A	Method Blank	Total/NA	Solid	8021B	21817
LCS 880-21817/1-A	Lab Control Sample	Total/NA	Solid	8021B	21817
LCSD 880-21817/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21817
880-12325-A-4-J MS	Matrix Spike	Total/NA	Solid	8021B	21817
880-12325-A-4-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21817

Prep Batch: 22141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	5035	
880-12343-2	PH04A	Total/NA	Solid	5035	
MB 880-22141/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22141/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22141/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2098-A-1-O MS	Matrix Spike	Total/NA	Solid	5035	
890-2098-A-1-P MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	Total BTEX	
880-12343-2	PH04A	Total/NA	Solid	Total BTEX	
880-12343-3	PH04B	Total/NA	Solid	Total BTEX	

Analysis Batch: 22183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	8021B	22141
880-12343-2	PH04A	Total/NA	Solid	8021B	22141
MB 880-21854/5-B	Method Blank	Total/NA	Solid	8021B	21854
MB 880-22141/5-A	Method Blank	Total/NA	Solid	8021B	22141
LCS 880-22141/1-A	Lab Control Sample	Total/NA	Solid	8021B	22141
LCSD 880-22141/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22141
890-2098-A-1-O MS	Matrix Spike	Total/NA	Solid	8021B	22141
890-2098-A-1-P MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22141

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

GC Semi VOA

Analysis Batch: 21460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	8015B NM	21476
880-12343-2	PH04A	Total/NA	Solid	8015B NM	21476
880-12343-3	PH04B	Total/NA	Solid	8015B NM	21476
MB 880-21476/1-A	Method Blank	Total/NA	Solid	8015B NM	21476
LCS 880-21476/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21476
LCSD 880-21476/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21476
890-2059-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	21476
890-2059-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21476

Prep Batch: 21476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	8015NM Prep	
880-12343-2	PH04A	Total/NA	Solid	8015NM Prep	
880-12343-3	PH04B	Total/NA	Solid	8015NM Prep	
MB 880-21476/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21476/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21476/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2059-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2059-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	8015 NM	
880-12343-2	PH04A	Total/NA	Solid	8015 NM	
880-12343-3	PH04B	Total/NA	Solid	8015 NM	

HPLC/IC

Analysis Batch: 46528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	300.0	46539
880-12343-2	PH04A	Total/NA	Solid	300.0	46539
880-12343-3	PH04B	Total/NA	Solid	300.0	46539
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300.0	46539
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300.0	46539
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	46539
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300.0	46539
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300.0	46539

Prep Batch: 46539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12343-1	PH04	Total/NA	Solid	300_Prep	
880-12343-2	PH04A	Total/NA	Solid	300_Prep	
880-12343-3	PH04B	Total/NA	Solid	300_Prep	
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300_Prep	
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Client Sample ID: PH04

Date Collected: 03/10/22 13:10
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12343-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	22141	03/23/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22183	03/24/22 01:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22171	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21630	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21476	03/14/22 08:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21460	03/14/22 19:47	AJ	XEN MID
Total/NA	Prep	300_Prep			5.02 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 17:04	A1S	XEN STF

Client Sample ID: PH04A

Date Collected: 03/10/22 13:15
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12343-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	22141	03/23/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22183	03/24/22 02:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22171	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21630	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21476	03/14/22 08:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21460	03/14/22 20:07	AJ	XEN MID
Total/NA	Prep	300_Prep			5.09 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 17:16	A1S	XEN STF

Client Sample ID: PH04B

Date Collected: 03/10/22 13:18
Date Received: 03/11/22 11:23

Lab Sample ID: 880-12343-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21817	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21979	03/21/22 16:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22171	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21630	03/15/22 10:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21476	03/14/22 08:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21460	03/14/22 20:28	AJ	XEN MID
Total/NA	Prep	300_Prep			5.08 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 17:51	A1S	XEN STF

Laboratory References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

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

Laboratory: Eurofins Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

Method Summary

Client: WSP USA Inc. Job ID: 880-12343-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.081518, -103.5452

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 STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12343-1
SDG: 32.081518, -103.5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12343-1	PH04	Solid	03/10/22 13:10	03/11/22 11:23	1
880-12343-2	PH04A	Solid	03/10/22 13:15	03/11/22 11:23	3
880-12343-3	PH04B	Solid	03/10/22 13:18	03/11/22 11:23	4

XENCO LABORATORIES

Chain of Custody

Work Order No: 12343

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

www xenco com Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level I ☐ Level II ☐ PST/USTR ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909 170	Routine	☒
Project Location	32 08518, -103 5452	Rush	☐
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	2.3/2.2	Thermometer ID	IR8
Received Intact	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Preservative Codes

HNO3 HN
H2S04 H2
HCL HL
None NO
NaOH Na
MeOH Me
Zn Acetate+ NaOH Zn

TAT starts the day recevied by the lab if received by 4 30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)	Sample Comments
PH04	SL	3-10-22	13:10	1	1	X	X	X	
PH04A	↓	↓	13:15	3	↓	↓	↓	↓	
PH04B	↓	↓	13:19	4	↓	↓	↓	↓	

880-12343 Chain of Custody

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Hadlie Green	[illegible]	3/11/22 11:23	2		
3			4		
5			6		

Revised Date101419 Rev 2019 1

Temp: 16.8 IR ID:HOU-323
C/F +0.2 Corrected Temp: 17.0

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

880-12343 Chain of Custody

Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica		Page: Page 1 of 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Job #: 880-12343-1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Louisiana; NELAP Texas		
Address: 4145 Greenbriar Dr	Due Date Requested: 3/17/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Red Bull 35 Federal 001	Project #: 88001014			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/300_Prep Chloride	Special Instructions/Note:
PH04 (880-12343-1)	3/10/22	13:10 Mountain		Solid			X	
PH04A (880-12343-2)	3/10/22	13:15 Mountain		Solid			X	
PH04B (880-12343-3)	3/10/22	13:18 Mountain		Solid			X	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by: Olivia Rodriguez	Date/Time:	Company	Received by:	3/26/22	9:10	Xenco
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:		Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:		Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.
	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12343-1
SDG Number: 32.081518, -103.5452

Login Number: 12343
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12343-1
SDG Number: 32.081518, -103.5452

Login Number: 12343
List Number: 2
Creator: Torres, Sandra

List Source: Eurofins Houston
List Creation: 03/26/22 01:15 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	17.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12344-1
Laboratory Sample Delivery Group: 32.08518, -103.5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/29/2022 10:08:46 AM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12344-1
SDG: 32.08518, -103.5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Job ID: 880-12344-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12344-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°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: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

Client Sample ID: PH05

Lab Sample ID: 880-12344-1
Matrix: Solid
Date Collected: 03/10/22 13:46
Date Received: 03/11/22 11:23
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		03/18/22 16:00	03/21/22 16:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/18/22 16:00	03/21/22 16:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/18/22 16:00	03/21/22 16:58	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/18/22 16:00	03/21/22 16:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/18/22 16:00	03/21/22 16:58	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/18/22 16:00	03/21/22 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 16:00*	*03/21/22 16:58*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*03/18/22 16:00*	*03/21/22 16:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/22/22 16:47	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			03/16/22 08:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 17:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 17:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/14/22 08:36*	*03/15/22 17:51*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/22 08:36*	*03/15/22 17:51*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.5**		9.96		mg/Kg		03/26/22 22:57	03/27/22 18:03	1

Client Sample ID: PH05A

Lab Sample ID: 880-12344-2
Matrix: Solid
Date Collected: 03/10/22 13:52
Date Received: 03/11/22 11:23
Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/18/22 16:00	03/21/22 17:18	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/18/22 16:00	03/21/22 17:18	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/18/22 16:00	03/21/22 17:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/18/22 16:00	03/21/22 17:18	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/18/22 16:00	03/21/22 17:18	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/18/22 16:00	03/21/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/18/22 16:00*	*03/21/22 17:18*	*1*

Eurofins Midland

Client Sample Results

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Client Sample ID: PH05A
Lab Sample ID: 880-12344-2
Date Collected: 03/10/22 13:52 **Matrix: Solid**
Date Received: 03/11/22 11:23
Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/18/22 16:00*	*03/21/22 17:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/22/22 16:47	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			03/16/22 08:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:12	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*105*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:12*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**206**		9.88	mg/Kg		03/26/22 22:57	03/27/22 18:15	1

Client Sample ID: PH05B
Lab Sample ID: 880-12344-3
Date Collected: 03/10/22 13:54 **Matrix: Solid**
Date Received: 03/11/22 11:23
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/22/22 07:30	03/22/22 19:22	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/22/22 07:30	03/22/22 19:22	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/22/22 07:30	03/22/22 19:22	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/22/22 07:30	03/22/22 19:22	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/22/22 07:30	03/22/22 19:22	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/22/22 07:30	03/22/22 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/22/22 07:30*	*03/22/22 19:22*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/22/22 07:30*	*03/22/22 19:22*	*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			03/22/22 16:47	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			03/16/22 08:25	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

Client Sample ID: PH05B
Date Collected: 03/10/22 13:54
Date Received: 03/11/22 11:23
Sample Depth: 4

Lab Sample ID: 880-12344-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 08:36	03/15/22 18:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/22 08:36	03/15/22 18:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 08:36	03/15/22 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:32*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:32*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.1**		9.86		mg/Kg		03/26/22 22:57	03/27/22 18:27	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-12325-A-4-J MS	Matrix Spike	101	99										
880-12325-A-4-K MSD	Matrix Spike Duplicate	106	90										
880-12344-1	PH05	101	117										
880-12344-2	PH05A	110	103										
880-12344-3	PH05B	102	108										
880-12580-A-1-J MS	Matrix Spike	104	113										
880-12580-A-1-K MSD	Matrix Spike Duplicate	105	111										
LCS 880-21817/1-A	Lab Control Sample	92	103										
LCS 880-22009/1-A	Lab Control Sample	102	111										
LCSD 880-21817/2-A	Lab Control Sample Dup	102	108										
LCSD 880-22009/2-A	Lab Control Sample Dup	101	110										
MB 880-21817/5-A	Method Blank	107	100										
MB 880-22009/5-A	Method Blank	101	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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-12311-A-1-B MS	Matrix Spike	103	96										
880-12311-A-1-C MSD	Matrix Spike Duplicate	106	96										
880-12344-1	PH05	92	92										
880-12344-2	PH05A	105	106										
880-12344-3	PH05B	88	92										
LCS 880-21467/2-A	Lab Control Sample	97	105										
LCSD 880-21467/3-A	Lab Control Sample Dup	104	110										
MB 880-21467/1-A	Method Blank	107	117										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21817/5-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21817

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 16:00	03/21/22 13:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:50*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:50*	*1*

Lab Sample ID: LCS 880-21817/1-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21817

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09138		mg/Kg		91	70 - 130		
Toluene			0.100	0.08468		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08831		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1854		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09262		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21817/2-A
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21817

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09682		mg/Kg		97	70 - 130	6	35
Toluene			0.100	0.08844		mg/Kg		88	70 - 130	4	35
Ethylbenzene			0.100	0.09875		mg/Kg		99	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2008		mg/Kg		100	70 - 130	8	35
o-Xylene			0.100	0.1002		mg/Kg		100	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-12325-A-4-J MS
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.0990	0.1063		mg/Kg		107	70 - 130		
Toluene	<0.00198	U	0.0990	0.09861		mg/Kg		100	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12325-A-4-J MS
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U	0.0990	0.1009		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.198	0.2149		mg/Kg		108	70 - 130
o-Xylene	0.00526		0.0990	0.1071		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-12325-A-4-K MSD
Matrix: Solid
Analysis Batch: 21979

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21817

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0996	0.09278		mg/Kg		93	70 - 130	14	35
Toluene	<0.00198	U	0.0996	0.1022		mg/Kg		103	70 - 130	4	35
Ethylbenzene	<0.00198	U	0.0996	0.1122		mg/Kg		113	70 - 130	11	35
m-Xylene & p-Xylene	<0.00396	U	0.199	0.2449		mg/Kg		122	70 - 130	13	35
o-Xylene	0.00526		0.0996	0.1206		mg/Kg		116	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: MB 880-22009/5-A
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22009

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 07:30	03/22/22 12:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 07:30	03/22/22 12:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/22/22 07:30	03/22/22 12:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/22/22 07:30	03/22/22 12:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/22/22 07:30	03/22/22 12:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/22/22 07:30	03/22/22 12:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/22/22 07:30*	*03/22/22 12:55*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/22/22 07:30*	*03/22/22 12:55*	*1*

Lab Sample ID: LCS 880-22009/1-A
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22009

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.100	0.1000		mg/Kg		100	70 - 130
Toluene			0.100	0.09951		mg/Kg		100	70 - 130
Ethylbenzene			0.100	0.1020		mg/Kg		102	70 - 130
m-Xylene & p-Xylene			0.200	0.2100		mg/Kg		105	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: LCS 880-22009/1-A
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22009

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.1026		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-22009/2-A
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22009

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09667		mg/Kg		97	70 - 130	3	35
Toluene			0.100	0.09516		mg/Kg		95	70 - 130	4	35
Ethylbenzene			0.100	0.09655		mg/Kg		97	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1996		mg/Kg		100	70 - 130	5	35
o-Xylene			0.100	0.09811		mg/Kg		98	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-12580-A-1-J MS
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 22009

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U F1	0.0998	0.06350	F1	mg/Kg		64	70 - 130		
Toluene	<0.00198	U F1	0.0998	0.04705	F1	mg/Kg		47	70 - 130		
Ethylbenzene	<0.00198	U F1	0.0998	0.03427	F1	mg/Kg		34	70 - 130		
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.06798	F1	mg/Kg		33	70 - 130		
o-Xylene	<0.00198	U F1	0.0998	0.03381	F1	mg/Kg		33	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: 880-12580-A-1-K MSD
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 22009

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0990	0.05763	F1	mg/Kg		58	70 - 130	10	35
Toluene	<0.00198	U F1	0.0990	0.05221	F1	mg/Kg		52	70 - 130	10	35
Ethylbenzene	<0.00198	U F1	0.0990	0.04620	F1	mg/Kg		46	70 - 130	30	35
m-Xylene & p-Xylene	<0.00397	U F1	0.198	0.09579	F1	mg/Kg		48	70 - 130	34	35
o-Xylene	<0.00198	U F1	0.0990	0.04725	F1	mg/Kg		47	70 - 130	33	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12580-A-1-K MSD
Matrix: Solid
Analysis Batch: 22109

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 22009

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

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

Lab Sample ID: MB 880-21467/1-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21467

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		03/14/22 08:36	03/15/22 10:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/14/22 08:36	03/15/22 10:25	1
o-Terphenyl	117		70 - 130	03/14/22 08:36	03/15/22 10:25	1

Lab Sample ID: LCS 880-21467/2-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	837.3		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	918.7		mg/Kg		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-21467/3-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	867.7		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1045		mg/Kg		104	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	110		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12311-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21609 **Prep Batch: 21467**

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	967.9		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	952.5		mg/Kg		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-12311-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21609 **Prep Batch: 21467**

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	998	1045		mg/Kg		103	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	976.3		mg/Kg		98	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-46539/28-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/22 22:57	03/27/22 13:07	1

Lab Sample ID: LCS 860-46539/29-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			100	95.01		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 860-46539/30-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	96.44		mg/Kg		96	80 - 120	1	20

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-12338-A-3-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	458		100	666.8	4	mg/Kg		208	80 - 120

Lab Sample ID: 880-12338-A-3-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	458		102	683.2	4	mg/Kg		221	80 - 120	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC VOA

Prep Batch: 21817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	5035	
880-12344-2	PH05A	Total/NA	Solid	5035	
MB 880-21817/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21817/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21817/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12325-A-4-J MS	Matrix Spike	Total/NA	Solid	5035	
880-12325-A-4-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	8021B	21817
880-12344-2	PH05A	Total/NA	Solid	8021B	21817
MB 880-21817/5-A	Method Blank	Total/NA	Solid	8021B	21817
LCS 880-21817/1-A	Lab Control Sample	Total/NA	Solid	8021B	21817
LCSD 880-21817/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21817
880-12325-A-4-J MS	Matrix Spike	Total/NA	Solid	8021B	21817
880-12325-A-4-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21817

Prep Batch: 22009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-3	PH05B	Total/NA	Solid	5035	
MB 880-22009/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22009/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22009/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12580-A-1-J MS	Matrix Spike	Total/NA	Solid	5035	
880-12580-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-3	PH05B	Total/NA	Solid	8021B	22009
MB 880-22009/5-A	Method Blank	Total/NA	Solid	8021B	22009
LCS 880-22009/1-A	Lab Control Sample	Total/NA	Solid	8021B	22009
LCSD 880-22009/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22009
880-12580-A-1-J MS	Matrix Spike	Total/NA	Solid	8021B	22009
880-12580-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22009

Analysis Batch: 22172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	Total BTEX	
880-12344-2	PH05A	Total/NA	Solid	Total BTEX	
880-12344-3	PH05B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	8015NM Prep	
880-12344-2	PH05A	Total/NA	Solid	8015NM Prep	
880-12344-3	PH05B	Total/NA	Solid	8015NM Prep	
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC Semi VOA (Continued)

Prep Batch: 21467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	8015B NM	21467
880-12344-2	PH05A	Total/NA	Solid	8015B NM	21467
880-12344-3	PH05B	Total/NA	Solid	8015B NM	21467
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015B NM	21467
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21467
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21467
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21467
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21467

Analysis Batch: 21685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	8015 NM	
880-12344-2	PH05A	Total/NA	Solid	8015 NM	
880-12344-3	PH05B	Total/NA	Solid	8015 NM	

HPLC/IC

Analysis Batch: 46528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	300.0	46539
880-12344-2	PH05A	Total/NA	Solid	300.0	46539
880-12344-3	PH05B	Total/NA	Solid	300.0	46539
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300.0	46539
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300.0	46539
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	46539
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300.0	46539
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300.0	46539

Prep Batch: 46539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12344-1	PH05	Total/NA	Solid	300_Prep	
880-12344-2	PH05A	Total/NA	Solid	300_Prep	
880-12344-3	PH05B	Total/NA	Solid	300_Prep	
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300_Prep	
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Client Sample ID: PH05 Lab Sample ID: 880-12344-1

Date Collected: 03/10/22 13:46 **Matrix: Solid**
Date Received: 03/11/22 11:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21817	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21979	03/21/22 16:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22172	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21685	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 17:51	AJ	XEN MID
Total/NA	Prep	300_Prep			5.02 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 18:03	A1S	XEN STF

Client Sample ID: PH05A Lab Sample ID: 880-12344-2

Date Collected: 03/10/22 13:52 **Matrix: Solid**
Date Received: 03/11/22 11:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21817	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21979	03/21/22 17:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22172	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21685	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 18:12	AJ	XEN MID
Total/NA	Prep	300_Prep			5.06 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 18:15	A1S	XEN STF

Client Sample ID: PH05B Lab Sample ID: 880-12344-3

Date Collected: 03/10/22 13:54 **Matrix: Solid**
Date Received: 03/11/22 11:23

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 g	22009	03/22/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22109	03/22/22 19:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22172	03/22/22 16:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21685	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 18:32	AJ	XEN MID
Total/NA	Prep	300_Prep			5.07 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 18:27	A1S	XEN STF

Laboratory References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Laboratory: Eurofins Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

Method Summary

Client: WSP USA Inc. Job ID: 880-12344-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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 STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12344-1
SDG: 32.08518, -103.5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12344-1	PH05	Solid	03/10/22 13:46	03/11/22 11:23	1
880-12344-2	PH05A	Solid	03/10/22 13:52	03/11/22 11:23	3
880-12344-3	PH05B	Solid	03/10/22 13:54	03/11/22 11:23	4

Chain of Custody

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

Work Order No: 12344

www.xenco.com Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level I ☐ Level II ☐ PST/USTs ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☑ ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909.170	Routine	☑
Project Location	32.06518, -103.5452	Rush	☐
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #:			

SAMPLE RECEIPT				
Temp Blank.	Yes (No)	Wet Ice	(Yes) No	
Temperature (°C)	2.3 / 2.2	Thermometer ID	IR8	
Received Intact:	(Yes) No			
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1	
Sample Custody Seals	Yes No (N/A)	Total Containers.		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)
PH05	SL	3-20-22	13:46	1	1	X	X	X
PH05A	↓	↓	13:52	3	↓	↓	↓	↓
PH05B	↓	↓	13:54	4	↓	↓	↓	↓

ANALYSIS REQUEST

Preservative Codes

HNO3 HN
H2S04 H2
HCL HL
None NO
NaOH Na
MeOH Me
Zn Acetate+ NaOH Zn

TAT starts the day recevied by the lab if received by 4 30pm

Sample Comments

880-12344 Chain of Custody

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

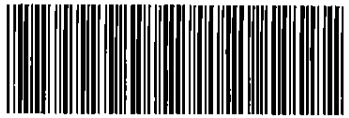
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility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

	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1	Hadlie Green		3/11/22 11:23	2		
3				4		
5				6		

Revised Date101419 Rev 2019.1

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record



880-12344 Chain of Custody

Eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica		Page: Page 1 of 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Job #: 880-12344-1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Louisiana; NELAP Texas		
Address: 4145 Greenbriar Dr	Due Date Requested: 3/17/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Red Bull 35 Federal 001	Project #: 88001014			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/300_Prep Chloride	Special Instructions/Note:
PH05 (880-12344-1)	3/10/22	13:46 Mountain		Solid		X	
PH05A (880-12344-2)	3/10/22	13:52 Mountain		Solid		X	
PH05B (880-12344-3)	3/10/22	13:54 Mountain		Solid		X	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Adriana Rodriguez	Date/Time:	Company	Received by: Sandra Lopez Date/Time: 3/26/22 910 Company: Xenco
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12344-1
SDG Number: 32.08518, -103.5452

Login Number: 12344
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12344-1
SDG Number: 32.08518, -103.5452

Login Number: 12344
List Number: 2
Creator: Torres, Sandra

List Source: Eurofins Houston
List Creation: 03/26/22 12:07 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	17.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12345-1
Laboratory Sample Delivery Group: 32.08518, -103.5452
Client Project/Site: Red Bull 35 Federal 001

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/29/2022 10:09:16 AM

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

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: Red Bull 35 Federal 001

Laboratory Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Job ID: 880-12345-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12345-1

Receipt
The samples were received on 3/11/2022 11:23 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 2.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21735 and analytical batch 880-21907 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Client Sample ID: PH06

Date Collected: 03/10/22 12:35
Date Received: 03/11/22 11:23
Sample Depth: 1

Lab Sample ID: 880-12345-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:22	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:22	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:22	1
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.00399		mg/Kg		03/17/22 13:16	03/19/22 12:22	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:22	1
Xylenes, Total	<0.00399	U F2 F1	0.00399		mg/Kg		03/17/22 13:16	03/19/22 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:22*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:22*	*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			03/21/22 12:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**84.3**		49.9		mg/Kg			03/16/22 08:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/15/22 08:41	03/15/22 18:53	1
Diesel Range Organics (Over C10-C28)	**84.3**		49.9		mg/Kg		03/15/22 08:41	03/15/22 18:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/22 08:41	03/15/22 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*03/15/22 08:41*	*03/15/22 18:53*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/15/22 08:41*	*03/15/22 18:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2410**		101		mg/Kg		03/26/22 22:57	03/27/22 18:39	10

Client Sample ID: PH06A

Date Collected: 03/10/22 12:39
Date Received: 03/11/22 11:23
Sample Depth: 2

Lab Sample ID: 880-12345-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:16	03/19/22 12:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:16	03/19/22 12:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:16	03/19/22 12:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/17/22 13:16	03/19/22 12:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:16	03/19/22 12:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/17/22 13:16	03/19/22 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:43*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Client Sample ID: PH06A
Lab Sample ID: 880-12345-2
Date Collected: 03/10/22 12:39 **Matrix: Solid**
Date Received: 03/11/22 11:23
Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:43*	*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			03/21/22 12:50	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			03/16/22 08:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 08:36	03/15/22 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*99*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:53*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/14/22 08:36*	*03/15/22 18:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15500**		100	mg/Kg		03/26/22 22:57	03/27/22 18:51	10

Client Sample ID: PH06B
Lab Sample ID: 880-12345-3
Date Collected: 03/10/22 12:44 **Matrix: Solid**
Date Received: 03/11/22 11:23
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:16	03/19/22 13:04	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:16	03/19/22 13:04	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:16	03/19/22 13:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/17/22 13:16	03/19/22 13:04	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/17/22 13:16	03/19/22 13:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/17/22 13:16	03/19/22 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:16*	*03/19/22 13:04*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/17/22 13:16*	*03/19/22 13:04*	*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			03/21/22 12:50	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			03/16/22 08:25	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Client Sample ID: PH06B

Date Collected: 03/10/22 12:44
Date Received: 03/11/22 11:23
Sample Depth: 4

Lab Sample ID: 880-12345-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 08:36	03/15/22 19:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:36	03/15/22 19:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:36	03/15/22 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*03/14/22 08:36*	*03/15/22 19:13*	*1*
o-Terphenyl	*87*		*70 - 130*	*03/14/22 08:36*	*03/15/22 19:13*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**157**		9.96		mg/Kg		03/26/22 22:57	03/27/22 19:03	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12345-1	PH06	100	110
880-12345-1 MS	PH06	99	95
880-12345-1 MSD	PH06	87	102
880-12345-2	PH06A	103	114
880-12345-3	PH06B	103	111
LCS 880-21735/1-A	Lab Control Sample	93	108
LCSD 880-21735/2-A	Lab Control Sample Dup	92	103
MB 880-21733/5-A	Method Blank	103	103
MB 880-21735/5-A	Method Blank	107	106

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12311-A-1-B MS	Matrix Spike	103	96
880-12311-A-1-C MSD	Matrix Spike Duplicate	106	96
880-12345-1	PH06	84	83
880-12345-2	PH06A	99	104
880-12345-3	PH06B	86	87
880-12419-A-1-B MS	Matrix Spike	110	94
880-12419-A-1-C MSD	Matrix Spike Duplicate	117	103
LCS 880-21467/2-A	Lab Control Sample	97	105
LCS 880-21614/2-A	Lab Control Sample	98	92
LCSD 880-21467/3-A	Lab Control Sample Dup	104	110
LCSD 880-21614/3-A	Lab Control Sample Dup	95	90
MB 880-21467/1-A	Method Blank	107	117
MB 880-21614/1-A	Method Blank	116	128

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21733/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21733

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*

Lab Sample ID: MB 880-21735/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21735

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:16	03/19/22 12:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:16	03/19/22 12:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:16	03/19/22 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/17/22 13:16*	*03/19/22 12:00*	*1*

Lab Sample ID: LCS 880-21735/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21735

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09677		mg/Kg		97	70 - 130		
Toluene			0.100	0.08857		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08995		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			0.200	0.1860		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09237		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-21735/2-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21735

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1040		mg/Kg		104	70 - 130	7	35

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: LCSD 880-21735/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21907 **Prep Batch: 21735**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.09291		mg/Kg		93	70 - 130	5	35
Ethylbenzene			0.100	0.09460		mg/Kg		95	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	4	35
o-Xylene			0.100	0.09601		mg/Kg		96	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-12345-1 MS **Client Sample ID: PH06**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21907 **Prep Batch: 21735**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0996	0.08751		mg/Kg		88	70 - 130
Toluene	<0.00200	U F1	0.0996	0.08708		mg/Kg		87	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0996	0.08818		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.199	0.1876		mg/Kg		94	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0996	0.09395		mg/Kg		94	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-12345-1 MSD **Client Sample ID: PH06**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21907 **Prep Batch: 21735**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0992	0.07734		mg/Kg		78	70 - 130	12	35
Toluene	<0.00200	U F1	0.0992	0.06406	F1	mg/Kg		64	70 - 130	30	35
Ethylbenzene	<0.00200	U F2 F1	0.0992	0.05880	F2 F1	mg/Kg		59	70 - 130	40	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.198	0.1216	F2 F1	mg/Kg		61	70 - 130	43	35
o-Xylene	<0.00200	U F2 F1	0.0992	0.06144	F2 F1	mg/Kg		61	70 - 130	42	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-21467/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21609 **Prep Batch: 21467**

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		03/14/22 08:36	03/15/22 10:25	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

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

Lab Sample ID: MB 880-21467/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21609 — **Prep Batch: 21467**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/14/22 08:36*	*03/15/22 10:25*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/14/22 08:36*	*03/15/22 10:25*	*1*

Lab Sample ID: LCS 880-21467/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21609 — **Prep Batch: 21467**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	837.3		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	918.7		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21467/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21609 — **Prep Batch: 21467**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	867.7		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1045		mg/Kg		104	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*110*		*70 - 130*

Lab Sample ID: 880-12311-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21609 — **Prep Batch: 21467**

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	967.9		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	952.5		mg/Kg		95	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: 880-12311-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21609 — **Prep Batch: 21467**

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	998	1045		mg/Kg		103	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	976.3		mg/Kg		98	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: MB 880-21614/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

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		03/15/22 08:41	03/15/22 10:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/15/22 08:41	03/15/22 10:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/15/22 08:41	03/15/22 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*03/15/22 08:41*	*03/15/22 10:25*	*1*
o-Terphenyl	*128*		*70 - 130*	*03/15/22 08:41*	*03/15/22 10:25*	*1*

Lab Sample ID: LCS 880-21614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1041		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	916.3		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: LCSD 880-21614/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1058		mg/Kg		106	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	871.6		mg/Kg		87	70 - 130	5	20

QC Sample Results

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Lab Sample ID: LCSD 880-21614/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21611 **Prep Batch: 21614**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-12419-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21611 **Prep Batch: 21614**

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	1176		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1119		mg/Kg		107	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-12419-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21611 **Prep Batch: 21614**

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	998	1146		mg/Kg		115	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1193		mg/Kg		115	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	103		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-46539/28-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/22 22:57	03/27/22 13:07	1

Lab Sample ID: LCS 860-46539/29-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 46528 **Prep Batch: 46539**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			100	95.01		mg/Kg		95	80 - 120

QC Sample Results

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-46539/30-A
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46539

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	96.44		mg/Kg		96	80 - 120	1	20

Lab Sample ID: 880-12338-A-3-C MS
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	458		100	666.8	4	mg/Kg		208	80 - 120

Lab Sample ID: 880-12338-A-3-D MSD
Matrix: Solid
Analysis Batch: 46528

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	458		102	683.2	4	mg/Kg		221	80 - 120	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC VOA

Prep Batch: 21733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21733/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 21735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	5035	
880-12345-2	PH06A	Total/NA	Solid	5035	
880-12345-3	PH06B	Total/NA	Solid	5035	
MB 880-21735/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21735/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21735/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12345-1 MS	PH06	Total/NA	Solid	5035	
880-12345-1 MSD	PH06	Total/NA	Solid	5035	

Analysis Batch: 21907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	8021B	21735
880-12345-2	PH06A	Total/NA	Solid	8021B	21735
880-12345-3	PH06B	Total/NA	Solid	8021B	21735
MB 880-21733/5-A	Method Blank	Total/NA	Solid	8021B	21733
MB 880-21735/5-A	Method Blank	Total/NA	Solid	8021B	21735
LCS 880-21735/1-A	Lab Control Sample	Total/NA	Solid	8021B	21735
LCSD 880-21735/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21735
880-12345-1 MS	PH06	Total/NA	Solid	8021B	21735
880-12345-1 MSD	PH06	Total/NA	Solid	8021B	21735

Analysis Batch: 22058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	Total BTEX	
880-12345-2	PH06A	Total/NA	Solid	Total BTEX	
880-12345-3	PH06B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-2	PH06A	Total/NA	Solid	8015NM Prep	
880-12345-3	PH06B	Total/NA	Solid	8015NM Prep	
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-2	PH06A	Total/NA	Solid	8015B NM	21467
880-12345-3	PH06B	Total/NA	Solid	8015B NM	21467
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015B NM	21467
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21467
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21467
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21467

QC Association Summary

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

GC Semi VOA (Continued)

Analysis Batch: 21609 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21467

Analysis Batch: 21611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	8015B NM	21614
MB 880-21614/1-A	Method Blank	Total/NA	Solid	8015B NM	21614
LCS 880-21614/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21614
LCSD 880-21614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21614
880-12419-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21614
880-12419-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21614

Prep Batch: 21614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	8015NM Prep	
MB 880-21614/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21614/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12419-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12419-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	8015 NM	
880-12345-2	PH06A	Total/NA	Solid	8015 NM	
880-12345-3	PH06B	Total/NA	Solid	8015 NM	

HPLC/IC

Analysis Batch: 46528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	300.0	46539
880-12345-2	PH06A	Total/NA	Solid	300.0	46539
880-12345-3	PH06B	Total/NA	Solid	300.0	46539
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300.0	46539
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300.0	46539
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	46539
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300.0	46539
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300.0	46539

Prep Batch: 46539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12345-1	PH06	Total/NA	Solid	300_Prep	
880-12345-2	PH06A	Total/NA	Solid	300_Prep	
880-12345-3	PH06B	Total/NA	Solid	300_Prep	
MB 860-46539/28-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-46539/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-46539/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-12338-A-3-C MS	Matrix Spike	Total/NA	Solid	300_Prep	
880-12338-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

Client Sample ID: PH06 Lab Sample ID: 880-12345-1

Date Collected: 03/10/22 12:35 **Matrix: Solid**
Date Received: 03/11/22 11:23

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	21735	03/17/22 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 12:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22058	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21686	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21614	03/15/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21611	03/15/22 18:53	AJ	XEN MID
Total/NA	Prep	300_Prep			4.97 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		10			46528	03/27/22 18:39	A1S	XEN STF

Client Sample ID: PH06A Lab Sample ID: 880-12345-2

Date Collected: 03/10/22 12:39 **Matrix: Solid**
Date Received: 03/11/22 11:23

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	21735	03/17/22 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 12:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22058	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21686	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 18:53	AJ	XEN MID
Total/NA	Prep	300_Prep			4.98 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		10			46528	03/27/22 18:51	A1S	XEN STF

Client Sample ID: PH06B Lab Sample ID: 880-12345-3

Date Collected: 03/10/22 12:44 **Matrix: Solid**
Date Received: 03/11/22 11:23

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	21735	03/17/22 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/19/22 13:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22058	03/21/22 12:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21686	03/16/22 08:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 19:13	AJ	XEN MID
Total/NA	Prep	300_Prep			5.02 g	50 mL	46539	03/26/22 22:57	ANP	XEN STF
Total/NA	Analysis	300.0		1			46528	03/27/22 19:03	A1S	XEN STF

Laboratory References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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

Laboratory: Eurofins Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

Method Summary

Client: WSP USA Inc. Job ID: 880-12345-1
Project/Site: Red Bull 35 Federal 001 SDG: 32.08518, -103.5452

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 STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: WSP USA Inc.
Project/Site: Red Bull 35 Federal 001

Job ID: 880-12345-1
SDG: 32.08518, -103.5452

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-12345-1	PH06	Solid	03/10/22 12:35	03/11/22 11:23	1
880-12345-2	PH06A	Solid	03/10/22 12:39	03/11/22 11:23	2
880-12345-3	PH06B	Solid	03/10/22 12:44	03/11/22 11:23	4

Chain of Custody

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

Work Order No: 12345

Page 1 of 1

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

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project
Reporting Level (II) Level III ☐ PST/USTT ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	Red Bull 35 Federal 001	Turn Around	
Project Number	31402909.170	Routine	☒
Project Location	32.00516, -103.5452	Rush	☐
Sampler's Name	Hadlie Green	Due Date	5 DAY
PO #:			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	2.3/2.2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Preservative Codes: HNO3 HN; H2S04 H2; HCL HL; None NO; NaOH Na; MeOH Me; Zn Acetate+ NaOH Zn

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 0=8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)	Sample Comments
PH01	SL	3-10-22	12:35	1	1	X	X	X	
PH01A	↓	↓	12:39	2	↓	↓	↓	↓	
PH01B	↓	↓	12:44	4	↓	↓	↓	↓	

880-12345 Chain of Custody

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 Hadlie Green	[signature]	3/11/22 11:23	2		
3			4		
5			6		

Revised Date101419 Rev 2019.1

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Temp. C/F +0.2 16.8 IR ID:HOU-323
Corrected Temp: 17.0

Chain of Custody Record

880-12345 Chain of Custody

Eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica		
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Louisiana; NELAP Texas		Job #: 880-12345-1
Address: 4145 Greenbriar Dr	Due Date Requested: 3/17/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Red Bull 35 Federal 001	Project #: 88001014			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify), Other

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	300_ORGFM_28D/300_Prep Chloride	Special Instructions/Note:
PH06 (880-12345-1)	3/10/22	12:35 Mountain		Solid	X	
PH06A (880-12345-2)	3/10/22	12:39 Mountain		Solid	X	
PH06B (880-12345-3)	3/10/22	12:44 Mountain		Solid	X	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Patricia Rodriguez			Sandra Baer	3/26/22 9:10	Xenco
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12345-1
SDG Number: 32.08518, -103.5452

Login Number: 12345
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-12345-1
SDG Number: 32.08518, -103.5452

Login Number: 12345
List Number: 2
Creator: Torres, Sandra

List Source: Eurofins Houston
List Creation: 03/26/22 01:09 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	17.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Beauvais, Charles R
To: Kalei Jennings
Subject: FW: (Extension Request) Red Bull 35 Federal 001H (NAPP2126444907) 09-03-2021
Date: Thursday, April 28, 2022 3:43:54 PM
Attachments: image001.png

[**EXTERNAL EMAIL**]

FYI

From: Beauvais, Charles R
Sent: Thursday, April 28, 2022 2:43 PM
To: EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Esparza, Brittany <Brittany.Esparza@conocophillips.com>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Fejervary Morena, Gustavo A <G.Fejervary@conocophillips.com>
Subject: (Extension Request) Red Bull 35 Federal 001H (NAPP2126444907) 09-03-2021

To Whom It May Concern,

COP is requesting an extension of the current April 30, 2022 deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the Red Bull 35 Federal 001H (Incident Number NAPP2126444907). The release was discovered on September 3, 2021. Site assessment and delineation have been completed. Labs received this week. Our next course of action will be to drill depth to water borings and begin working on the remediation work plan submittal. COP request a three-month extension until July 29, 2022.

Respectfully,

Charles R. Beauvais **II**
Senior Environmental Engineer | Environmental Operations | **ConocoPhillips**
(M) 575-988-2043
Charles.R.Beauvais@conocophillips.com

Our work is never so urgent or important that we cannot take the time to do it safely and in an environmentally responsible manner.

From: OCDOnline@state.nm.us
To: Kalei Jennings
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 129705
Date: Tuesday, August 2, 2022 3:09:44 PM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Kalei Jennings for COG OPERATING LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2126444907,
for the following reasons:

- **Remediation Plan Denied. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Release has not been sufficiently addressed to the most stringent criteria. Please resubmit a revised Remediation Plan by September 2, 2022.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 129705.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Jennifer Nobui
Environmental Specialist-Advanced
505-470-3407
Jennifer.Nobui@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

ENSOLUM

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	NAPP2126444907
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Conoco Phillips``	OGRID	
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688-9057
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # *(assigned by OCD)*	NAPP2126444907
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.08518 Longitude -103.5452

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Red Bull 35 Federal 001	Site Type	Tank Battery
Date Release Discovered	September 3, 2021	API# *(if applicable)*	30-025-34015

Unit Letter	Section	Township	Range	County
K	35	25S	33E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Intrepid Potash - New Mexico)

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 0.1	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a release from the flare.
No fluid was recovered due to the fire burning off and standing fluid. The release resulted in a flare fire on the pad.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? 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 September 3, 2021 at 6:40 pm 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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Brittany Esparza Date: 9/17/2021

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: Ramona Marcus Date: 9/21/2021

L48 Spill Volume Estimate Form

NAPP2126444907

Facility Name & Number:	ederal 1H
Asset Area:	DBEN
Release Discovery Date & Time:	9/3/2021 6:00AM
Release Type:	Oil
Provide any known details about the event:	Vessel swamped out causing fluid to go out flare

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	10.0	10.0	0.10	4	100.000	0.002	0.037	0.000	0.037			
Rectangle B					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
								Total Volume Release:	0.037			

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

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 50656
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	9/21/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
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 II Date: __09/01/2022_____

email: __Charles.R.Beauvais@conocophillips.com_____ Telephone: ___575-988-2043_____

OCD Only

Received by: Jocelyn Harimon Date: 09/01/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: ___Charles Beauvais_____ Title: __Senior Environmental Engineer_____

Signature: Charles R. Beauvais II Date: __09/01/2022_____

email: __Charles.R.Beauvais@conocophillips.com_____ Telephone: __575-988-2043_____

OCD Only

Received by: Jocelyn Harimon Date: 09/02/2022

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Jennifer Nobui Date: 09/09/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 140279

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 140279
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Revised Remediation Plan Approved.	9/9/2022