



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

May 3, 2022

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

**RE: Closure Request
Roadrunner Junction
Incident Number NAPP2136150657
Eddy County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP) on behalf of Lucid Energy Delaware, LLC (Lucid) presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Roadrunner Delivery (Site) in Unit O, Section 23, Township 24 South, Range 27 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following the release of pipeline liquid from a Natural Gas line at the Site. Based on the excavation activities and soil sample laboratory analytical results, Lucid is submitting this Closure Request, and requesting no further action (NFA) for Incident Number NAPP2136150657

RELEASE BACKGROUND

On December 02, 2021, corrosion on a 10-inch main line resulted in a pinhole leak leading to the volume release of 611 MCF of natural gas and 5 bbls of pipeline liquid forming on the bottom of the pipe. From the total release volume, 5 bbls of pipeline liquid were recovered. Immediate notice was not provided to New Mexico Oil Conservation Division (NMOCD), until an accurate volume calculation of the loss could be provided. Lucid reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on December 30, 2021. The release was assigned Incident Number Napp2136150657.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of State Engineer (NMOSE) well C-01452, located approximately 6806 feet Northwest of the Site. The groundwater well has a reported depth to groundwater of 70 feet bgs and an unreported total depth bgs. The referenced well records are



included in Attachment 1. The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 687.6 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On February 11, 2022, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Five boreholes were advanced and collected within the release extent from a depth of 1 to 10 feet bgs to assess the lateral extent of impacted soil. Soil from the borehole soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Based on field screenings, clean lateral depth was determined to be at 10 ft bgs. Based on visual observations and, field screening activities, for the two borehole samples, excavation activities were warranted to remove impacted soil to a total depth of 8 ft bgs.

EXCAVATION ACTIVITIES AND ANALYTICAL RESULTS

On April 7, 2022, WSP personnel returned to the Site to oversee additional excavation and completion of activities. Based on visual observations and, field screening activities, for the borehole soil samples, delineation and excavation were completed to remove impacted soil in the area surrounding the release extent. Excavation activities were performed using a track hoe and hydro excavator. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to an approximate depth of 8-foot bgs.



Following removal of impacted soil, WSP collected 6-point composite soil samples every 200 square feet from the floor of the excavation. The 6-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS06 were collected from the floor of the excavation, from a depth of 1-ft to 8-feet bgs. Samples FS01-FS03 were collected in the shallower southern excavation at approximately 1 foot bgs. Samples FS04-FS06 were collected from the main excavation at approximately 8-feet bgs. Due to the depth of the excavation, unstable soil, and pipeline proximity, soil samples were collected from the sidewalls (SW) of the excavation utilizing a backhoe bucket. The excavation SW soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 4. Photographic documentation was completed during the Site visits and a photographic log is included in Attachment 3.

Laboratory analytical results for excavation soil samples FS01 through FS06 and SW01-SW3 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

The excavation area measured approximately 634.2 square feet. A total of approximately 70 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the Lea Land disposal in Carlsbad, New Mexico. After completion of confirmation sampling, the excavation area was backfilled.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the December 02, 2022, release of natural gas pipeline liquid. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the most stringent Table 1 Closure Criteria. Based on the soil sample analytical results, no further remediation was required. Lucid backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.

Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WSP and Lucid believe these remedial actions are protective of human health, the environment, and groundwater. As such, Lucid respectfully requests no further action for Incident Number NAPP2136150657. A signed C141 closure request is included in Attachment 5.



District II
Page 4

If you have any questions or comments, please do not hesitate to contact Mr. Travis Casey
at (575) 689-5949.

Sincerely,

WSP USA Inc.

A handwritten signature in grey ink that reads 'pbenner'.

Payton Benner
Consultant, Environmental Scientist

A handwritten signature in black ink that reads 'Travis L Casey'.

Travis Casey
Sr. Consultant, Environmental Scientist

cc:

Bureau of Land Management

Attachments:

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

FIGURES

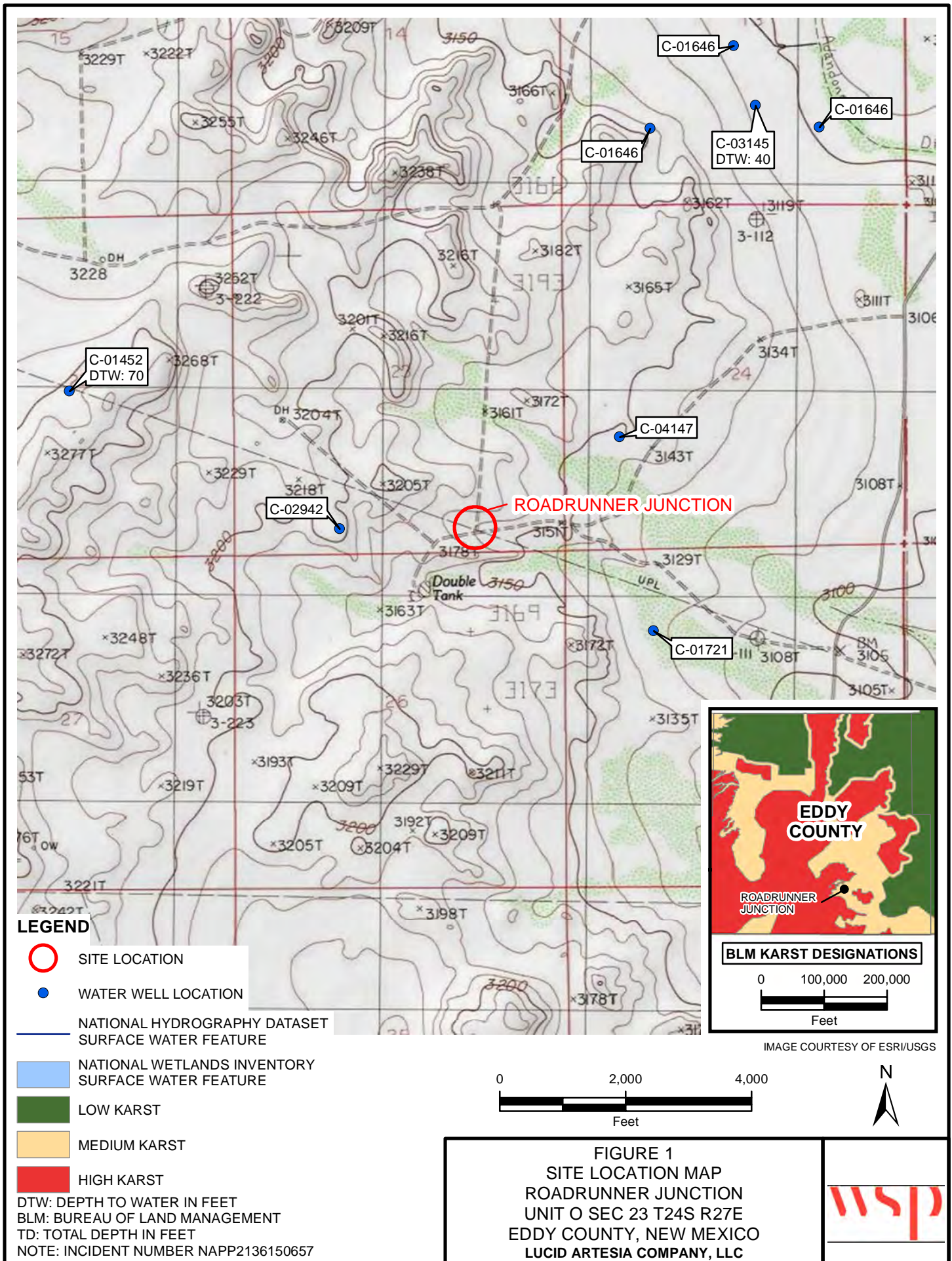


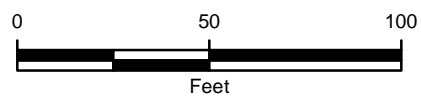




IMAGE COURTESY OF ESRI

LEGEND

-  BOREHOLE
-  RELEASE EXTENT



NOTE: INCIDENT NUMBER NAPP2136150657
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
ROADRUNNER JUNCTION
UNIT O SEC 23 T24S R27E
EDDY COUNTY, NEW MEXICO
LUCID ARTESIA COMPANY, LLC



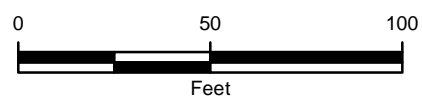
**LEGEND**

● FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

■ SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

█ EXCAVATION EXTENT

IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2136150657
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
ROADRUNNER JUNCTION
UNIT O SEC 23 T24S R27E
EDDY COUNTY, NEW MEXICO
LUCID ARTESIA COMPANY, LLC



TABLE 1

Table 1

**Soil Analytical Results
Roadrunner Junction
Incident Number NAPP2136150657
Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Excavation Floor Samples										
FS01	04/07/2022	1	<0.00199	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	156
FS02	04/07/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	19.9
FS03	04/07/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	7.99
FS04	04/07/2022	8	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	155
FS05	04/07/2022	8	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	80.5
FS06	04/07/2022	8	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	89.4
Excavation Sidewall Samples										
SW01	04/07/2022	0 - 4	<0.00200	<0.00212	<50.0	<50.0	<50.0	<50.0	<50.0	161
SW02	04/07/2022	0 - 8	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	18.9
SW03	04/07/2022	0 - 8	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	20.8

Notes:

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

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

Greyed data represents samples that were excavated

ATTACHMENT 1: REFERENCED WELL RECORD



New Mexico Office of the State Engineer

Water Right Summary


[get image list](#)

WR File Number: C 01452

Subbasin: C

Cross Reference: -

Primary Purpose: STK 72-12-1 LIVESTOCK WATERING

Primary Status: PMT PERMIT

Total Acres:

Subfile: -

Header: -

Total Diversion: 3

Cause/Case: -

Owner: WILLIAM DIESCHER

Documents on File

	Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
				1	2		To				
get images	463277	72121	1971-04-07	PMT	LOG	C 01452	T			3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	64Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 01452		Shallow			22	24S 27E	577435	3563175*	CENTER E1/2,E1/2,E1/2

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

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


4/27/22 1:51 PM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
C	01452				22	24S	27E	577435	3563175*		
<hr/>											
Driller License:		30	Driller Company:			BARRON, EMMETT					
Driller Name:		BARRON, EMMETT									
Drill Start Date:		07/21/1971	Drill Finish Date:			07/23/1971		Plug Date:			
Log File Date:		08/02/1971	PCW Rev Date:					Source:		Shallow	
Pump Type:		Pipe Discharge Size:					Estimated Yield:				
Casing Size:		7.00	Depth Well:			95 feet		Depth Water:		70 feet	
<hr/>											
Water Bearing Stratifications:					Top	Bottom	Description				
					60	70	Sandstone/Gravel/Conglomerate				

*UTM location was derived from PLSS - see Help

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

4/27/22 1:51 PM

POINT OF DIVERSION SUMMARY



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

Click to hide News Bulletins

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

USGS 321000104092501 25S.27E.02.21122

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°10'00", Longitude 104°09'25" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 3,164 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Castile Formation" (312CSTL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1978-01-11	1987-10-13	3
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](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321000104092501)

[agency_code=USGS&site_no=321000104092501](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321000104092501)



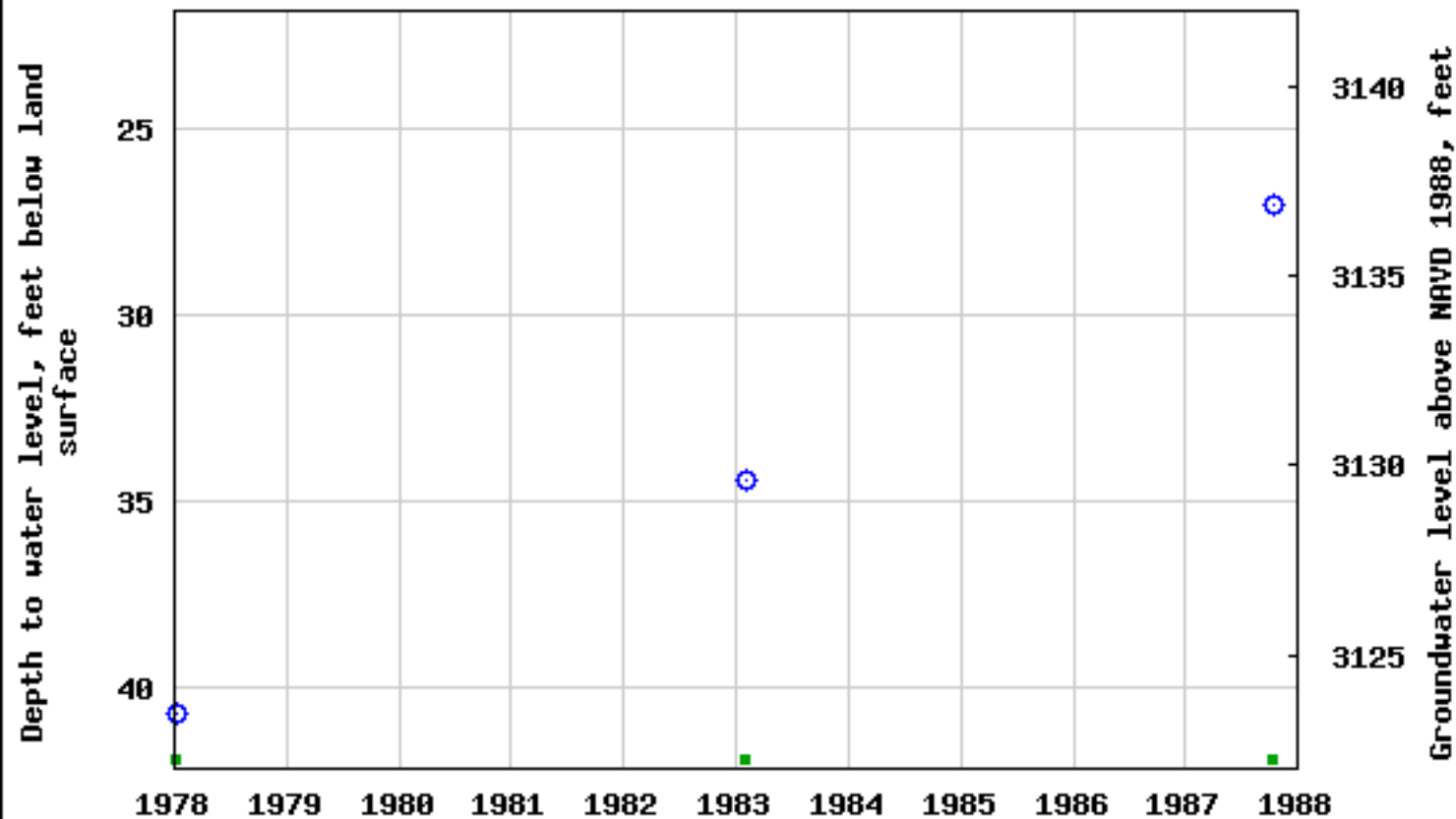
Page Contact Information: [New Mexico Water Data Support Team](#)

Page Last Modified: 2022-04-27 16:16:22 EDT


0.28 0.26 caww01





USGS 321000104092501 25S.27E.02.21122





ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name:		Date:	
								BH01		2/11/2022	
								Site Name: Road Runner Junction			
								RP or Incident Number: NAPP2136150657			
WSP Job Number: 31403665.02											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.196577 -104.157496				Field Screening: Chloride, PID		Hole Diameter: 0.5'		Total Depth: 8'			
Comments: all chloride field screenings contain a correction factor of 40%											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
						1					
						2					
						3					
						4					
						5					
						6					
						7					
D	<168	4.0	N	BH01	8	8	SM	SILTY SAND, dark brown, poorly graded, medium grained, light odor, no staining			
TD @ 8 ft bgs											

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name:		Date:	
								BH02		2/11/2022	
								Site Name: Road Runner Junction			
								RP or Incident Number: NAPP2136150657			
WSP Job Number: 31403665.02											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.196577 -104.157496				Field Screening: Chloride, PID		Hole Diameter: 0.5'		Total Depth: 10'			
Comments: all chloride field screenings contain a correction factor of 40%											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	100	0.3	Y	BH02	1	0	SM	SILTY SAND, brown, poorly graded, fine grained, no trace roots, dry, yellow/greenish staining, strong odor			
						1					
						2					
						3					
						4					
						5					
						6					
D	1,064	293.0	Y		8	8	SM	SAA			
						9					
D	168	74.2	Y	BH02A	10	10	SM	SAA			
TD @ 10 ft bgs											

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name:		Date:	
								BH03		2/11/2022	
								Site Name: Road Runner Junction			
								RP or Incident Number: NAPP2136150657			
WSP Job Number: 31403665.02											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.196577 -104.157496				Field Screening: Chloride, PID		Hole Diameter: 0.5'		Total Depth: 1'			
Comments: all chloride field screenings contain a correction factor of 40%											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	823.2	81.4	N	BH03	0.5	0	CCHE	Caliche, tan/light brown, granular, faint odor smell, no staining			
D	<168	9.3	N	BH03A	1	1	SM	SILTY SAND, dark brown, poorly graded, medium grained light odor, no staining			
TD @ 1 ft bgs											

 <div> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name:		Date:	
								BH04		2/11/2022	
								Site Name: Road Runner Junction			
								RP or Incident Number: NAPP2136150657			
WSP Job Number: 31403665.02											
LITHOLOGIC / SOIL SAMPLING LOG								Logged By AC		Method: Hand Auger	
Lat/Long: 32.196577 -104.157496				Field Screening: Chloride, PID				Hole Diameter: 0.5'		Total Depth: 1'	
Comments: all chloride field screenings contain a correction factor of 40%											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	683.2	56.8	N	BH04	0.5	0	CCHE	Caliche, tan/light brown, granular, faint odor smell, no staining			
D	<168	15.5	N	BH04A	1	1	SM	Silty sand, dark brown, poorly graded, medium grained, light odor, no staining			
TD @ 1 ft bgs											

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name:		Date:	
								BH05		2/11/2022	
								Site Name: Road Runner Junction			
								RP or Incident Number: NAPP2136150657			
WSP Job Number: 31403665.02											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.196577 -104.157496				Field Screening: Chloride, PID		Hole Diameter: 0.5'		Total Depth: 1'			
Comments: all chloride field screenings contain a correction factor of 40%											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	683.2	27.5	N	BH05	0.5	0	CCHE	Caliche, tan/light brown, granular, faint odor smell, no staining			
D	<168	14.5	N	BH05A	1	1	SM	Silty sand, dark brown, poorly graded, medium grained, light odor, no staining			
TD @ 1 ft bgs											

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

Lucid Energy Delaware	Roadrunner Junction Eddy County, New Mexico	NAPP2136150657
-----------------------	--	----------------

Photo No.	Date	
1	April 8, 2022	
Photo taken during excavation activities.		 A photograph showing a deep, rectangular excavation trench in dry, reddish-brown soil. A silver metal pipe is visible, protruding from the ground near the edge of the trench. In the background, there is some construction equipment, including a yellow excavator, and orange safety fencing.


Photo No.	Date	
2	April 8, 2022	
Photo taken during excavation activities.		 A photograph of an excavation site. A long, shallow trench has been dug into the ground. To the right of the trench, there is a steep, exposed earthen embankment. The ground is dry and dusty. In the background, there are some construction materials and equipment, including a yellow excavator.



PHOTOGRAPHIC LOG

Lucid Energy Delaware	Roadrunner Junction Eddy County, New Mexico	NAPP2136150657
-----------------------	--	----------------

Photo No.	Date	
3	April 8, 2022	
Photo taken during excavation activities.		 A photograph showing a deep, narrow excavation pit in dry, cracked earth. A black pipe with a yellow band is visible in the center of the pit, and a white pipe is visible on the right side. A black tarp is partially visible in the background.

Photo No.	Date	
4	April 8, 2022	
Photo taken during excavation activities.		 A photograph showing a wider view of an excavation site. A large white pipe is in the foreground, and a black pipe is visible in the center. In the background, there are white storage tanks and various pipes and valves. A black tarp is also visible on the left side.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2179-1

Laboratory Sample Delivery Group: 31403665.020 task 02

Client Project/Site: Road Runner Junctions

For:

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

Attn: Travis Casey

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

Authorized for release by:
4/18/2022 1:28:26 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Laboratory Job ID: 890-2179-1
SDG: 31403665.020 task 02

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	13
QC Sample Results	14
QC Association Summary	18
Lab Chronicle	21
Certification Summary	24
Method Summary	25
Sample Summary	26
Chain of Custody	27
Receipt Checklists	28

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
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: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Job ID: 890-2179-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2179-1

Receipt

The samples were received on 4/11/2022 11:01 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 5.6°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: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: SW01

Lab Sample ID: 890-2179-1

Date Collected: 04/07/22 09:10

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:42	1
m-Xylene & p-Xylene	0.0110		0.00400	mg/Kg		04/12/22 14:17	04/13/22 02:42	1
o-Xylene	0.0102		0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:42	1
Xylenes, Total	0.0212		0.00400	mg/Kg		04/12/22 14:17	04/13/22 02:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/12/22 14:17	04/13/22 02:42	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/12/22 14:17	04/13/22 02:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0212		0.00400	mg/Kg			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 13:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 13:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	04/12/22 11:00	04/13/22 13:29	1
o-Terphenyl	119		70 - 130	04/12/22 11:00	04/13/22 13:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		4.96	mg/Kg			04/16/22 14:50	1

Client Sample ID: SW02

Lab Sample ID: 890-2179-2

Date Collected: 04/07/22 09:15

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 0 - 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/12/22 14:17	04/13/22 03:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:08	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/12/22 14:17	04/13/22 03:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/12/22 14:17	04/13/22 03:08	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: SW02

Lab Sample ID: 890-2179-2

Date Collected: 04/07/22 09:15

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 0 - 8

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	04/12/22 14:17	04/13/22 03:08	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			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 13:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/12/22 11:00	04/13/22 13:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/12/22 11:00	04/13/22 13:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			04/12/22 11:00	04/13/22 13:50	1
o-Terphenyl	97		70 - 130			04/12/22 11:00	04/13/22 13:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.9		4.95	mg/Kg			04/16/22 15:09	1

Client Sample ID: SW03

Lab Sample ID: 890-2179-3

Date Collected: 04/07/22 09:20

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 0 - 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:35	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:35	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 03:35	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 03:35	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 03:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	04/12/22 14:17	04/13/22 03:35	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/12/22 14:17	04/13/22 03:35	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			04/13/22 10:18	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			04/14/22 13:42	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: SW03

Lab Sample ID: 890-2179-3

Date Collected: 04/07/22 09:20

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 0 - 8

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		04/12/22 11:00	04/13/22 14:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 14:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			04/12/22 11:00	04/13/22 14:11	1
o-Terphenyl	112		70 - 130			04/12/22 11:00	04/13/22 14:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.8		4.99	mg/Kg			04/16/22 15:16	1

Client Sample ID: FS01

Lab Sample ID: 890-2179-4

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		04/12/22 14:17	04/13/22 04:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			04/12/22 14:17	04/13/22 04:01	1
1,4-Difluorobenzene (Surr)	83		70 - 130			04/12/22 14:17	04/13/22 04:01	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			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 14:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 14:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			04/12/22 11:00	04/13/22 14:32	1
o-Terphenyl	102		70 - 130			04/12/22 11:00	04/13/22 14:32	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS01

Lab Sample ID: 890-2179-4

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		5.01	mg/Kg			04/16/22 15:22	1

Client Sample ID: FS02

Lab Sample ID: 890-2179-5

Date Collected: 04/07/22 10:25

Matrix: Solid

Date Received: 04/11/22 11:01

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		04/12/22 14:17	04/13/22 04:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 04:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 04:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 04:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 04:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 04:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			04/12/22 14:17	04/13/22 04:27	1
1,4-Difluorobenzene (Surr)	91		70 - 130			04/12/22 14:17	04/13/22 04:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 14:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 14:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 14:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			04/12/22 11:00	04/13/22 14:53	1
o-Terphenyl	111		70 - 130			04/12/22 11:00	04/13/22 14:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.98	mg/Kg			04/16/22 15:28	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS03

Lab Sample ID: 890-2179-6

Date Collected: 04/07/22 10:30

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/22 14:17	04/13/22 04:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 04:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/22 14:17	04/13/22 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	04/12/22 14:17	04/13/22 04:53	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/12/22 14:17	04/13/22 04:53	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			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 15:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 15:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	04/12/22 11:00	04/13/22 15:14	1
o-Terphenyl	104		70 - 130	04/12/22 11:00	04/13/22 15:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.99		5.00	mg/Kg			04/16/22 15:47	1

Client Sample ID: FS04

Lab Sample ID: 890-2179-7

Date Collected: 04/07/22 10:45

Matrix: Solid

Date Received: 04/11/22 11:01

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		04/12/22 14:17	04/13/22 05:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:20	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/12/22 14:17	04/13/22 05:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:20	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/12/22 14:17	04/13/22 05:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/12/22 14:17	04/13/22 05:20	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS04

Lab Sample ID: 890-2179-7

Date Collected: 04/07/22 10:45

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	04/12/22 14:17	04/13/22 05:20	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			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 15:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 15:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 15:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			04/12/22 11:00	04/13/22 15:56	1
o-Terphenyl	88		70 - 130			04/12/22 11:00	04/13/22 15:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	155		5.00	mg/Kg			04/16/22 15:54	1

Client Sample ID: FS05

Lab Sample ID: 890-2179-8

Date Collected: 04/07/22 10:50

Matrix: Solid

Date Received: 04/11/22 11:01

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		04/12/22 14:17	04/13/22 05:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 05:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 05:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/22 14:17	04/13/22 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	04/12/22 14:17	04/13/22 05:46	1
1,4-Difluorobenzene (Surr)	80		70 - 130	04/12/22 14:17	04/13/22 05:46	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			04/13/22 10:18	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			04/14/22 13:42	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS05

Lab Sample ID: 890-2179-8

Date Collected: 04/07/22 10:50

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 16:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 16:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/22 11:00	04/13/22 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			04/12/22 11:00	04/13/22 16:17	1
o-Terphenyl	97		70 - 130			04/12/22 11:00	04/13/22 16:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.5		4.95	mg/Kg			04/16/22 16:00	1

Client Sample ID: FS06

Lab Sample ID: 890-2179-9

Date Collected: 04/07/22 11:15

Matrix: Solid

Date Received: 04/11/22 11:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/22 14:17	04/13/22 06:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			04/12/22 14:17	04/13/22 06:12	1
1,4-Difluorobenzene (Surr)	89		70 - 130			04/12/22 14:17	04/13/22 06:12	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			04/13/22 10:18	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			04/14/22 13:42	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		04/12/22 11:00	04/13/22 16:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 16:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/22 11:00	04/13/22 16:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			04/12/22 11:00	04/13/22 16:38	1
o-Terphenyl	109		70 - 130			04/12/22 11:00	04/13/22 16:38	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS06

Date Collected: 04/07/22 11:15

Date Received: 04/11/22 11:01

Sample Depth: 1

Lab Sample ID: 890-2179-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	89.4		5.01	mg/Kg			04/16/22 16:07	1	

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2179-1	SW01	117	86
890-2179-1 MS	SW01	100	97
890-2179-1 MSD	SW01	108	86
890-2179-2	SW02	83	86
890-2179-3	SW03	116	84
890-2179-4	FS01	98	83
890-2179-5	FS02	101	91
890-2179-6	FS03	90	97
890-2179-7	FS04	98	85
890-2179-8	FS05	93	80
890-2179-9	FS06	90	89
LCS 880-23396/1-A	Lab Control Sample	104	101
LCSD 880-23396/2-A	Lab Control Sample Dup	100	96
MB 880-23326/5-A	Method Blank	73	86
MB 880-23396/5-A	Method Blank	76	79
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2175-A-31-B MS	Matrix Spike	120	109
890-2175-A-31-C MSD	Matrix Spike Duplicate	118	111
890-2179-1	SW01	121	119
890-2179-2	SW02	98	97
890-2179-3	SW03	110	112
890-2179-4	FS01	102	102
890-2179-5	FS02	106	111
890-2179-6	FS03	102	104
890-2179-7	FS04	90	88
890-2179-8	FS05	98	97
890-2179-9	FS06	109	109
LCS 880-23323/2-A	Lab Control Sample	103	92
LCSD 880-23323/3-A	Lab Control Sample Dup	104	93
MB 880-23323/1-A	Method Blank	108	110
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23326/5-A

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/11/22 16:58	04/12/22 12:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/11/22 16:58	04/12/22 12:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/11/22 16:58	04/12/22 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/11/22 16:58	04/12/22 12:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/11/22 16:58	04/12/22 12:36	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/11/22 16:58	04/12/22 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	04/11/22 16:58	04/12/22 12:36	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/11/22 16:58	04/12/22 12:36	1

Lab Sample ID: MB 880-23396/5-A

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23396

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/12/22 14:17	04/13/22 02:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/22 14:17	04/13/22 02:16	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/12/22 14:17	04/13/22 02:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	04/12/22 14:17	04/13/22 02:16	1
1,4-Difluorobenzene (Surr)	79		70 - 130	04/12/22 14:17	04/13/22 02:16	1

Lab Sample ID: LCS 880-23396/1-A

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08635		mg/Kg		86	70 - 130
Toluene	0.100	0.09348		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08788		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1856		mg/Kg		93	70 - 130
o-Xylene	0.100	0.09659		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-23396/2-A

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07834		mg/Kg		78	70 - 130	10	35

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

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

Lab Sample ID: LCSD 880-23396/2-A

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08179		mg/Kg		82	70 - 130	13	35
Ethylbenzene	0.100	0.08438		mg/Kg		84	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1702		mg/Kg		85	70 - 130	9	35
o-Xylene	0.100	0.08634		mg/Kg		86	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2179-1 MS

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08237		mg/Kg		83	70 - 130
Toluene	<0.00200	U	0.0998	0.08510		mg/Kg		84	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.07691		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	0.0110		0.200	0.1679		mg/Kg		79	70 - 130
o-Xylene	0.0102		0.0998	0.08103		mg/Kg		71	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-2179-1 MSD

Matrix: Solid

Analysis Batch: 23363

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1022		mg/Kg		102	70 - 130	21	35
Toluene	<0.00200	U	0.100	0.1089		mg/Kg		108	70 - 130	25	35
Ethylbenzene	<0.00200	U	0.100	0.09425		mg/Kg		94	70 - 130	20	35
m-Xylene & p-Xylene	0.0110		0.200	0.2063		mg/Kg		97	70 - 130	21	35
o-Xylene	0.0102		0.100	0.1009		mg/Kg		91	70 - 130	22	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

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

Lab Sample ID: MB 880-23323/1-A

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23323

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		04/11/22 16:44	04/13/22 10:24	1

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

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

Lab Sample ID: MB 880-23323/1-A

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23323

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		04/11/22 16:44	04/13/22 10:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/11/22 16:44	04/13/22 10:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			04/11/22 16:44	04/13/22 10:24	1
o-Terphenyl	110		70 - 130			04/11/22 16:44	04/13/22 10:24	1

Lab Sample ID: LCS 880-23323/2-A

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1179		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	1000	944.4		mg/Kg		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	92		70 - 130				

Lab Sample ID: LCSD 880-23323/3-A

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23323

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1064		mg/Kg		106	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	909.3		mg/Kg		91	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: 890-2175-A-31-B MS

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 23323

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	998	1058		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1022		mg/Kg		99	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	120		70 - 130						
o-Terphenyl	109		70 - 130						

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

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

Lab Sample ID: 890-2175-A-31-C MSD

Matrix: Solid

Analysis Batch: 23431

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 23323

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	997	1140		mg/Kg		114	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1061		mg/Kg		103	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	111		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23467/1-A

Matrix: Solid

Analysis Batch: 23681

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/16/22 14:31	1

Lab Sample ID: LCS 880-23467/2-A

Matrix: Solid

Analysis Batch: 23681

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.8		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-23467/3-A

Matrix: Solid

Analysis Batch: 23681

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	266.6		mg/Kg		107	90 - 110	3	20

Lab Sample ID: 890-2179-1 MS

Matrix: Solid

Analysis Batch: 23681

Client Sample ID: SW01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	161		248	393.8		mg/Kg		94	90 - 110

Lab Sample ID: 890-2179-1 MSD

Matrix: Solid

Analysis Batch: 23681

Client Sample ID: SW01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	161		248	410.8		mg/Kg		101	90 - 110	4	20

Eurofins Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

GC VOA

Prep Batch: 23326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23326/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 23363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	8021B	23396
890-2179-2	SW02	Total/NA	Solid	8021B	23396
890-2179-3	SW03	Total/NA	Solid	8021B	23396
890-2179-4	FS01	Total/NA	Solid	8021B	23396
890-2179-5	FS02	Total/NA	Solid	8021B	23396
890-2179-6	FS03	Total/NA	Solid	8021B	23396
890-2179-7	FS04	Total/NA	Solid	8021B	23396
890-2179-8	FS05	Total/NA	Solid	8021B	23396
890-2179-9	FS06	Total/NA	Solid	8021B	23396
MB 880-23326/5-A	Method Blank	Total/NA	Solid	8021B	23326
MB 880-23396/5-A	Method Blank	Total/NA	Solid	8021B	23396
LCS 880-23396/1-A	Lab Control Sample	Total/NA	Solid	8021B	23396
LCSD 880-23396/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23396
890-2179-1 MS	SW01	Total/NA	Solid	8021B	23396
890-2179-1 MSD	SW01	Total/NA	Solid	8021B	23396

Prep Batch: 23396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	5035	
890-2179-2	SW02	Total/NA	Solid	5035	
890-2179-3	SW03	Total/NA	Solid	5035	
890-2179-4	FS01	Total/NA	Solid	5035	
890-2179-5	FS02	Total/NA	Solid	5035	
890-2179-6	FS03	Total/NA	Solid	5035	
890-2179-7	FS04	Total/NA	Solid	5035	
890-2179-8	FS05	Total/NA	Solid	5035	
890-2179-9	FS06	Total/NA	Solid	5035	
MB 880-23396/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23396/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23396/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2179-1 MS	SW01	Total/NA	Solid	5035	
890-2179-1 MSD	SW01	Total/NA	Solid	5035	

Analysis Batch: 23443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	Total BTEX	
890-2179-2	SW02	Total/NA	Solid	Total BTEX	
890-2179-3	SW03	Total/NA	Solid	Total BTEX	
890-2179-4	FS01	Total/NA	Solid	Total BTEX	
890-2179-5	FS02	Total/NA	Solid	Total BTEX	
890-2179-6	FS03	Total/NA	Solid	Total BTEX	
890-2179-7	FS04	Total/NA	Solid	Total BTEX	
890-2179-8	FS05	Total/NA	Solid	Total BTEX	
890-2179-9	FS06	Total/NA	Solid	Total BTEX	

Eurofins Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

GC Semi VOA

Prep Batch: 23323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	8015NM Prep	
890-2179-2	SW02	Total/NA	Solid	8015NM Prep	
890-2179-3	SW03	Total/NA	Solid	8015NM Prep	
890-2179-4	FS01	Total/NA	Solid	8015NM Prep	
890-2179-5	FS02	Total/NA	Solid	8015NM Prep	
890-2179-6	FS03	Total/NA	Solid	8015NM Prep	
890-2179-7	FS04	Total/NA	Solid	8015NM Prep	
890-2179-8	FS05	Total/NA	Solid	8015NM Prep	
890-2179-9	FS06	Total/NA	Solid	8015NM Prep	
MB 880-23323/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23323/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23323/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2175-A-31-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2175-A-31-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	8015B NM	23323
890-2179-2	SW02	Total/NA	Solid	8015B NM	23323
890-2179-3	SW03	Total/NA	Solid	8015B NM	23323
890-2179-4	FS01	Total/NA	Solid	8015B NM	23323
890-2179-5	FS02	Total/NA	Solid	8015B NM	23323
890-2179-6	FS03	Total/NA	Solid	8015B NM	23323
890-2179-7	FS04	Total/NA	Solid	8015B NM	23323
890-2179-8	FS05	Total/NA	Solid	8015B NM	23323
890-2179-9	FS06	Total/NA	Solid	8015B NM	23323
MB 880-23323/1-A	Method Blank	Total/NA	Solid	8015B NM	23323
LCS 880-23323/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23323
LCSD 880-23323/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23323
890-2175-A-31-B MS	Matrix Spike	Total/NA	Solid	8015B NM	23323
890-2175-A-31-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23323

Analysis Batch: 23529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Total/NA	Solid	8015 NM	
890-2179-2	SW02	Total/NA	Solid	8015 NM	
890-2179-3	SW03	Total/NA	Solid	8015 NM	
890-2179-4	FS01	Total/NA	Solid	8015 NM	
890-2179-5	FS02	Total/NA	Solid	8015 NM	
890-2179-6	FS03	Total/NA	Solid	8015 NM	
890-2179-7	FS04	Total/NA	Solid	8015 NM	
890-2179-8	FS05	Total/NA	Solid	8015 NM	
890-2179-9	FS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Soluble	Solid	DI Leach	
890-2179-2	SW02	Soluble	Solid	DI Leach	
890-2179-3	SW03	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

HPLC/IC (Continued)

Leach Batch: 23467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-4	FS01	Soluble	Solid	DI Leach	
890-2179-5	FS02	Soluble	Solid	DI Leach	
890-2179-6	FS03	Soluble	Solid	DI Leach	
890-2179-7	FS04	Soluble	Solid	DI Leach	
890-2179-8	FS05	Soluble	Solid	DI Leach	
890-2179-9	FS06	Soluble	Solid	DI Leach	
MB 880-23467/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23467/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23467/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2179-1 MS	SW01	Soluble	Solid	DI Leach	
890-2179-1 MSD	SW01	Soluble	Solid	DI Leach	

Analysis Batch: 23681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2179-1	SW01	Soluble	Solid	300.0	23467
890-2179-2	SW02	Soluble	Solid	300.0	23467
890-2179-3	SW03	Soluble	Solid	300.0	23467
890-2179-4	FS01	Soluble	Solid	300.0	23467
890-2179-5	FS02	Soluble	Solid	300.0	23467
890-2179-6	FS03	Soluble	Solid	300.0	23467
890-2179-7	FS04	Soluble	Solid	300.0	23467
890-2179-8	FS05	Soluble	Solid	300.0	23467
890-2179-9	FS06	Soluble	Solid	300.0	23467
MB 880-23467/1-A	Method Blank	Soluble	Solid	300.0	23467
LCS 880-23467/2-A	Lab Control Sample	Soluble	Solid	300.0	23467
LCSD 880-23467/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23467
890-2179-1 MS	SW01	Soluble	Solid	300.0	23467
890-2179-1 MSD	SW01	Soluble	Solid	300.0	23467

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: SW01

Lab Sample ID: 890-2179-1

Date Collected: 04/07/22 09:10

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 02:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 13:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 14:50	CH	XEN MID

Client Sample ID: SW02

Lab Sample ID: 890-2179-2

Date Collected: 04/07/22 09:15

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 03:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:09	CH	XEN MID

Client Sample ID: SW03

Lab Sample ID: 890-2179-3

Date Collected: 04/07/22 09:20

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 03:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 14:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:16	CH	XEN MID

Client Sample ID: FS01

Lab Sample ID: 890-2179-4

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/11/22 11:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.033 g	5 mL	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 04:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS01

Lab Sample ID: 890-2179-4

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/11/22 11:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 14:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:22	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-2179-5

Date Collected: 04/07/22 10:25

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 04:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 14:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:28	CH	XEN MID

Client Sample ID: FS03

Lab Sample ID: 890-2179-6

Date Collected: 04/07/22 10:30

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 04:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 15:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:47	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-2179-7

Date Collected: 04/07/22 10:45

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 05:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 15:56	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Client Sample ID: FS04

Lab Sample ID: 890-2179-7

Date Collected: 04/07/22 10:45

Matrix: Solid

Date Received: 04/11/22 11:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 15:54	CH	XEN MID

Client Sample ID: FS05

Lab Sample ID: 890-2179-8

Date Collected: 04/07/22 10:50

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 05:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 16:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 16:00	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-2179-9

Date Collected: 04/07/22 11:15

Matrix: Solid

Date Received: 04/11/22 11:01

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	23396	04/12/22 14:17	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23363	04/13/22 06:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23443	04/13/22 10:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23529	04/14/22 13:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23323	04/12/22 11:00	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23431	04/13/22 16:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23467	04/13/22 12:25	CH	XEN MID
Soluble	Analysis	300.0		1			23681	04/16/22 16:07	CH	XEN MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Road Runner Juctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Laboratory: Eurofins Midland

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

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Road Runner Junctions

Job ID: 890-2179-1
SDG: 31403665.020 task 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2179-1	SW01	Solid	04/07/22 09:10	04/11/22 11:01	0 - 4
890-2179-2	SW02	Solid	04/07/22 09:15	04/11/22 11:01	0 - 8
890-2179-3	SW03	Solid	04/07/22 09:20	04/11/22 11:01	0 - 8
890-2179-4	FS01	Solid	04/07/22 10:20	04/11/22 11:01	1
890-2179-5	FS02	Solid	04/07/22 10:25	04/11/22 11:01	1
890-2179-6	FS03	Solid	04/07/22 10:30	04/11/22 11:01	1
890-2179-7	FS04	Solid	04/07/22 10:45	04/11/22 11:01	1
890-2179-8	FS05	Solid	04/07/22 10:50	04/11/22 11:01	1
890-2179-9	FS06	Solid	04/07/22 11:15	04/11/22 11:01	1



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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Travis Casey	Bill to: (if different)	Lucid Energy Group
Company Name:	WSP USA	Company Name:	Michael Gart
Address:	508 W Stevens St	Address:	201 S 4th
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	Artesia, NM 88210
Phone:	575-689-5949	Email:	mgart@lucid-energy.com, Travis.Casey@wsp.com

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

Project Name:	Road Runner Junction	Turn Around	
Project Number:	31403665.020 Task 02	Routine <input checked="" type="checkbox"/>	
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Temperature (°C):	5.8/5.4	Thermometer ID
Received Inact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor:
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Total Containers:
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	



890-2179 Chain of Custody

TAT starts the day received 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
SW01	S	04/07/22	9:10	0-4'	1	X	X	X	Composite
SW02	S	04/07/22	9:15	0-8'	1	X	X	X	Composite
SW03	S	04/07/22	9:20	0-8'	1	X	X	X	Composite
FS01	S	04/07/22	10:20	1'	1	X	X	X	Composite
FS02	S	04/07/22	10:25	1'	1	X	X	X	Composite
FS03	S	04/07/22	10:30	1'	1	X	X	X	Composite
FS04	S	04/07/22	10:45	1'	1	X	X	X	Composite
FS05	S	04/07/22	10:50	1'	1	X	X	X	Composite
FS06	S	04/07/22	11:15	1'	1	X	X	X	Composite

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	<i>Travis Casey</i>	4.11.22 1101			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2179-1

SDG Number: 31403665.020 task 02

Login Number: 2179

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2179-1

SDG Number: 31403665.020 task 02

Login Number: 2179

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/12/22 11:16 AM

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

ATTACHMENT 5: C141 CLOSURE REQUEST FORM

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Michael Gant Title: Environmental Compliance Manager

Signature: MGant Date: 5/26/2022

email: MGant@lucid-energy.com Telephone: 3143307876

OCD Only

Received by: _____ Date: _____

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

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

Printed Name: Jennifer Nobui Title: Environmental Specialist A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 111050

CONDITIONS

Operator: LUCID ENERGY DELAWARE, LLC 201 S. Fourth Street Artesia, NM 88210	OGRID: 372422
	Action Number: 111050
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

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