District I 1625 N. French Dr., Hobbs, NM 88240 District III 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	nAPP2105537640
District RP	
Facility ID	
Application ID	

## **Release Notification**

#### **Responsible Party**

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email kyle.littrell@exxonmobil.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

#### **Location of Release Source**

(NAD 83 in decimal degrees to 5 decimal places)

Longitude

-103.91023

Latitude 32.23148

Site Name Nash Draw #8	Site Type SWD
Date Release Discovered 2/14/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County	
L	08	24S	30E	Eddy	

Surface Owner: State 🗵 Federal 🗌 Tribal 🗌 Private (Name: \_

#### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)				
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)		
▼ Produced Water	Volume Released (bbls) 4300	Volume Recovered (bbls) 4300		
	Is the concentration of total dissolved solids (TDS) 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 Loss of power prevented alarm notification when tank inlet valve failed to close, releasing fluids into impermeable containment. All fluids were returned to production. A 48-hour liner inspection notice was sent to NMOCD District 2. Liner was inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation activities.				

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Was this a major release as defined by 19.15.29.7(A) NMAC? X Yes No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	
By Kyle Littrell to Bratcher, Mike, EMNRD'; 'Hamlet, Robert, EMNRD'; 'Venegas, Victoria, EMNRD'; 'emily.hernandez@state.nm.us'; 'BLM_NM_CFO_Spill@blm.gov'; 'Morgan, Crisha A'; 'Hensley, Chad, EMNRD' on Monday, February 15, 2021 10:44 AM via email.		

#### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\checkmark$  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:	Title: Environmental Manager
Signature: <u><u><u></u><u><u></u><u><u></u><u><u></u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u></u>	Date: Telephone:
OCD Only	
Received by:	Date:

NA

Location:	on: Nash Draw #8 SWD		
Spill Date:	: 2/14/2021		
	Area 1		
Approximate A	rea =	24142.70	cu. Ft.
	VOLUME OF LEAK		
<b>Total Produced</b>	Water =	4300.00	bbls
	TOTAL VOLUME OF LEAK		
Total Produced	Water =	4300.00	BBLS
	TOTAL VOLUME RECOVERED		
Total Produced	l Water =	4300.00	bbls

Received by OCD: 5/11/2021 1:28:07 PM State of New Mexico

Oil Conservation Division

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Incident ID	nAPP2105537640
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### Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;100</u> (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 <b>not</b> 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 <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- X 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.

Received by OCD: 5/11/2021	1:28:07 PM			Page 5 of 74
F01111 C-141			Incident ID	nAPP2105537640
Page 4	Oil Conservation Division		District RP	
			Facility ID	
			Application ID	
I hereby certify that the informative regulations all operators are required public health or the environmer failed to adequately investigate addition, OCD acceptance of a and/or regulations.         Printed Name:       Kyle I         Signature:       Kyle.littrell@e	ation given above is true and complete to the juired to report and/or file certain release no nt. The acceptance of a C-141 report by the and remediate contamination that pose a thi C-141 report does not relieve the operator o Littrell	e best of my knowledge a tifications and perform co OCD does not relieve the reat to groundwater, surfa f responsibility for comp 	nd understand that purs prrective actions for rele e operator of liability sha ice water, human health liance with any other fea <u>onmental Manager</u>	uant to OCD rules and ases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only Received by:		Date:		

Page 6

Oil Conservation Division

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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.

<b><u>Closure Report Attachment Checklist</u>:</b> 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	Description of remediation activities									
I hereby certify that the information given above is true and comple and regulations all operators are required to report and/or file certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regul restore, reclaim, and re-vegetate the impacted surface area to the co accordance with 19.15.29.13 NMAC including notification to the operation.	ete to the best of my knowledge and understand that pursuant to OCD rules in release notifications and perform corrective actions for releases which f a C-141 report by the OCD does not relieve the operator of liability emediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for lations. The responsible party acknowledges they must substantially conditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.									
Printed Name: Kyle Littrell	Title: Environmental Manager									
Signature:	Date: <u>5/5/2021</u>									
email:Kyle_Littrell@exxonmobil.com	Telephone:432-221-7331									
OCD Only										
Received by:	Date:									
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	y of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible /or regulations.									
Closure Approved by:	Date:									
Printed Name:	Title:									
—										

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Oil Conservation Division

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Application ID	

## Closure

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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 r and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases whic 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: Kyle Littrell Title:Environmental Manager Signature:	ules h								
eman. <u>Kyle_Littlen@exxonmobil.com</u> Telephone. <u>452-221-7551</u>									
OCD Only									
Received by: <u>Robert Hamlet</u> Date: <u>8/18/2021</u>									
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate 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.	e and sible								
Closure Approved by: <u>Robert Hamlet</u> Date: <u>8/18/2021</u>									
Printed Name: <u>Robert Hamlet</u> Title: <u>Environmental Specialist - Advanced</u>	_								

WSP USA

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

May 6, 2021

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

RE: Closure Request Nash Draw #8 Incident Number nAPP2105537640 Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Nash Draw #8 (Site) in Unit L, Section 08, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number nAPP2105537640.

#### **RELEASE BACKGROUND**

On February 14, 2021, loss of power prevented alarm notification when a tank inlet valve failed to close, resulting in the release of 4,300 barrels (bbls) of produced water into a lined steel containment. Approximately 4,300 bbls of produced water were recovered and returned to production. A 48-hour advance notice of liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) immediately via email on February 15, 2021 and subsequently submitted a Form C-141 on February 24, 2021. The release was assigned Incident Number nAPP2105537640.

#### SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be 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 NMOSE well C 02108, located approximately 0.22 miles



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southeast of the Site. An inspection was conducted to field verify the location of the water well and confirm the distance to the Site. The groundwater well has a reported depth to groundwater of 186 feet bgs and a total depth of 200 feet bgs. Ground surface elevation at the groundwater well location is 3,195 feet amsl, which is approximately 9 feet lower in elevation than the Site. There are five groundwater wells within a 2-mile radius of the Site that indicate regional depth to groundwater is greater than 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 600 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
- 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 ACTIVITIES

On March 11, 2021 and April 22, 2021, WSP personnel were at the Site to evaluate the release extent and conduct delineation activities. One borehole (BH01) was advanced via hand auger at the location of the tear in the liner to assess the vertical extent of impacted soil. Four additional boreholes (BH02 through BH05) were advanced around the outside of the lined containment to confirm lateral delineation. Boreholes BH01 through BH05 were advanced to a depth of 1-foot bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips, respectively. Two delineation soil samples were collected from each borehole at depths of 0.5 feet and 1-foot bgs. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The borehole and delineation

vsp

District II Page 3

soil sample locations are depicted on Figure 2. Photographic documentation of the delineation activities is included in Attachment 3. Following delineation activities, the tear in the liner was bonded and repaired by XTO to restore the integrity of the liner.

The delineation 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 Xenco Laboratories (Eurofins Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH- diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

#### SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples BH01/BH01A through BH05/BH05A, collected at depths of 0.5 feet and 1-foot bgs, 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.

#### **CLOSURE REQUEST**

Following the failed liner integrity inspection at the Site, WSP personnel advanced five boreholes (BH01 through BH05) within and around the lined containment to assess for the presence or absence of impacted soil resulting from the February 14, 2021 produced water release within lined containment. Two delineation soil samples were collected from each borehole (BH01 through BH05) at depths of 0.5 feet and 1-foot bgs. Laboratory analytical results for the delineation soil samples indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, the release was vertically delineated to the most stringent Closure Criteria. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts and soil sample laboratory analytical results compliant with the Closure Criteria, XTO respectfully requests NFA for Incident Number nAPP2105537640.

**NSP** 

District II Page 4

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Fatima Smith Associate Consultant, Geologist

Ashley L. Ager

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

cc: Kyle Littrell, XTO Bureau of Land Management

Attachments:

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

# FIGUR

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#### Table 1

#### Soil Analytical Results Nash Draw #8 Incident Number nAPP2105537640 XTO Energy, Inc. 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 Cle	osure Criteria (NM	AC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
<b>Delineation Samples</b>										
BH01	03/11/2021	0.5	< 0.00202	< 0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	3,700
BH01A	03/11/2021	1	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	523
BH02	04/23/2021	0.5	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	417
BH02A	04/23/2021	1	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	164
BH03	04/23/2021	0.5	0.00677	0.0286	<49.8	<49.8	<49.8	<49.8	<49.8	29.4
BH03A	04/23/2021	1	< 0.00200	< 0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	31.8
BH04	04/23/2021	0.5	< 0.00200	< 0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	390
BH04A	04/23/2021	1	< 0.00202	< 0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	478
BH05	04/23/2021	0.5	< 0.00202	< 0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	471
BH05A	04/23/2021	1	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	460

#### 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 - motor 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

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GO



USGS Home Contact USGS Search USGS

#### **National Water Information System: Web Interface**

USGS Water Resources

Data Category: Groundwater Geographic Area: United States

 $\checkmark$ 

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- Full News 🔊

Groundwater levels for the Nation

\* IMPORTANT: Next Generation Station Page

#### Search Results -- 1 sites found

site\_no list =

• 321339103541801

#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 321339103541801 24S.30E.08.33222

Available data for this site Groundwater: Field measurements 🗸 GO

Eddy County, New Mexico Hydrologic Unit Code 13060011

Latitude 32°13'39", Longitude 103°54'18" NAD27

Land-surface elevation 3,207 feet above NAVD88

The depth of the well is 192 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

**Output formats** 

Table of data	
Tab-separated data	
Graph of data	
Reselect period	



Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

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: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-03-11 15:33:21 EST 0.63 0.57 nadww01





		(quarters are smallest to la	argest) (	(NAD83 UTM in meters)							
Well Tag	POD Number	Q64 Q16 Q4 Sec 7	ws Rng	X Y							
	C 02108	1 3 08 2	24S 30E	602702 3566487* 🥘							
x Driller Lic	ense:	<b>Driller Company:</b>	Driller Company:								
Driller Nai	me: UNKNOWN										
Drill Start	Date:	<b>Drill Finish Date:</b>	12/31/1963	Plug Date:							
Log File Da	ate:	PCW Rcv Date:		Source:							
Pump Type	e:	Pipe Discharge Size:		<b>Estimated Yield:</b>	16 GPM						
Casing Size	e: 7.00	Depth Well:	200 feet	Depth Water:	186 feet						

\*UTM location was derived from PLSS - see Help

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

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POINT OF DIVERSION SUMMARY

				WS	P USA		BH or PH Name: BH01	Date: 3/11/2020		
			Ę	08 West S	Stevens S	street		Site Name: Nash Draw #8		
			Car	Isbad, Ne	w Mexico	88220		RP or Incident Number: NAPP2105537640		
					LTE Job Number: TE012921032					
LITHOLOGIC / SOIL SAMPLING LOG								Logged By WM	Method: Hand Auger	
Lat/Long:				Field Scre	ening: סוכ			Hole Diameter:	Total Depth:	
Comments:				Gnioride, I	-IU			7.23	I'	
Moisture Content Chloride	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lithology/Remarks		
dry 3,09	6 0.1	n	BH01	0.5	0.5	SM	SAND, d no stain,	ry, red-brown, fine g no odor	rain, well graded, small amount of clay,	
dry 45	0.4	n	BH01A	1	1					
									Total Depth: 1 foot	

	119		)	5 Car	WS 08 West S Isbad, Ne	P USA Stevens S w Mexico	BH or PH Name:Date:BH024/23/2020Site Name: Nash Draw #8RP or Incident Number: NAPP2105537640LTE Job Number: TE012921032				
Lat/Lo	na.	LITH	OLUG		Field Scre	ING LO	G		Logged By: EN Hole Diameter:		Method: Hand Auger
Easter					Chloride, I	PID			4.25"		1'
Comm	ients:										
Moisture Content	Content Content Content (ppm)							Lithology/Remarks			
dry	313	0.0	n	BH02	0.5	0.5	SM	SAND, d	ry, red-brown, fine g	rain, we	ell graded, small amount of clay,
					-	-		no stain,	no odor		
dry	179	0.0	n	BH02A	1	1					
											Total Depth: 1 foot

					WS	P USA			BH or PH Name:	Date:	
									BH03	4/23/2020	
				5 Car	08 West S	Stevens S	street		Site Name: Nash Draw #8		
				Cui	135000, 140		00220		RP or Incident Number: NAPP2105537640		
										Nethod: Hand Augor	
Lat/Lo	ona.	LIIA			Field Scre	enina:	9		Hole Diameter	Total Depth	
Laties					Chloride, I	PID			4.25"	1'	
Comm	nents:										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lith	nology/Remarks	
dry	<156	0.0	n	BH03	0.5	0.5	SM	SAND, d no stain,	ry, red-brown, fine <u>c</u> no odor	grain, well graded, small amount of cla	
dry	<156	0.0	n	BH03A	1	1					
										Total Depth: 1 foot	

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220									BH or PH Name: BH04 Site Name: Nash Draw # RP or Incident Number: I	Date: 4/23/2020 8 NAPP2105537640	
									LTE Job Number: TE012921032		
Lat/Lo	ng:	LIIN	OLUC		Field Scre	ening:	9		Hole Diameter:	Total Depth:	
					Chloride, I	PID			4.25"	1'	
Comm	ients:										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lithology/Remarks		
dry	464	0.0	n	BH04	0.5	0.5	SM	SAND, c no stain,	lry, red-brown, fine g no odor	rain, well graded, small amount of clay,	
dry	179	0.0	n	BH04A	1	1					
										Total Depth: 1 foot	

									BH or PH Name:		Date:	
WSP USA									BH05		4/23/2020	
				5	08 West	Stevens S	Street		Site Name: Nash Draw #8			
				Car	Isbad, Ne	w Mexico	88220		RP or Incident Number: NAPP2105537640			
									LTE Job Number: TE012921032			
		LITH	OLOC	SIC / SOIL	SAMPL	ING LO	G		Logged By: EN		Method: Hand Auger	
Lat/Lo	ng:				Field Scre	ening:			Hole Diameter:		Total Depth:	
Comm	ents:				Chloride, I	PID			4.25"		1'	
Comm	ento.											
re 1t	de (	r )	bi	#	Sample		ock ol					
istu nte	loric pm	apo	ainir	nple	Depth	Depth	S/R mb		Litl	hology/R	Remarks	
Μo	Ч С	≥ q	Sta	Sar	(ft bgs)	(it bgs)	ISC Sy					
dry	212	0.0	n	BH05	0.5	0.5		SAND d	ry rod brown fino	arain wa	all graded small amount of clay	
ary	313	0.0	Π	DI 105	0.5	0.5	5171	no stain,	no odor	grain, we	en graded, sman amount of clay,	
drv	224	0.0	n	BH05A	1 -	1						
y		0.0										
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						-						

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# vsp

	PHOTOGRAPHIC LOG	
XTO Energy, Inc	Nash Draw #8	TE012921032
	Eddy County, New Mexico	







	PHOTOGRAPHIC LOG	
XTO Energy, Inc	Nash Draw #8	TE012921032
	Eddy County, New Mexico	

Photo No.	Date	
3	March 11, 2021	
Patching of liner	after completion of	and the second
borehole (BH	01) facing north-	
nor	theast	

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# eurofins 😵

# **Environment Testing** America

## **ANALYTICAL REPORT**

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

#### Laboratory Job ID: 890-331-1

Laboratory Sample Delivery Group: TE012921032 Client Project/Site: Nash 8 SWD

#### For:

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

Attn: Dan Moir

RAMER

Authorized for release by: 3/22/2021 7:10:55 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.

LINKS **Review your project** results through Total Access Have a Question? Ask-The Expert Visit us at: www.eurofinsus.com/Env Released to Imaging: 8/18/2021 2:26:28 PM Page 31 of 74

Laboratory Job ID: 890-331-1 SDG: TE012921032

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#### **Definitions/Glossary**

Client: WSP USA Inc. Project/Site: Nash 8 SWD Job ID: 890-331-1 SDG: TE012921032

Glossary		3
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	4
%R	Percent Recovery	
CFL	Contains Free Liquid	5
CFU	Colony Forming Unit	<b>U</b>
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)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

Eurofins Carlsbad

Job ID: 890-331-1 SDG: TE012921032

#### Job ID: 890-331-1

#### Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-331-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/11/2021 4:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.4° C.

#### **Receipt Exceptions**

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-331-1) and BH01 A (890-331-2).

#### **Client Sample Results**

Client: WSP USA Inc. Project/Site: Nash 8 SWD

#### Client Sample ID: BH01 Date Collected: 03/11/21 12:21 Date Received: 03/11/21 16:18

Method: BTEX 8021 - Ge	eneral Subcontra	ct Method							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
m,p-Xylenes	<0.00403	U	0.00403		mg/kg		03/19/21 16:40	03/21/21 14:32	1
o-Xylene	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
Toluene	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
Total BTEX	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
Total Xylenes	<0.00202	U	0.00202		mg/kg		03/19/21 16:40	03/21/21 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	101		70 - 130				03/19/21 16:40	03/21/21 14:32	1
4-Bromofluorobenzene	111		70 - 130				03/19/21 16:40	03/21/21 14:32	1

#### Method: CHLORIDE E300 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3700		25.0		mg/kg		03/18/21 22:00	03/19/21 09:28	5

Method: TPH 8015_NM_MOD -	General Si	ubcontrac	t Method						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 04:46	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 04:46	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 04:46	1
Total TPH	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 04:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 135				03/15/21 17:00	03/16/21 04:46	1
o-Terphenyl	94		70 - 135				03/15/21 17:00	03/16/21 04:46	1

#### Client Sample ID: BH01 A Date Collected: 03/11/21 12:29 Date Received: 03/11/21 16:18

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Method: BTEX 8021 - Gene	ral Subcontra	ct Method							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
m,p-Xylenes	<0.00401	U	0.00401		mg/kg		03/19/21 16:40	03/21/21 15:56	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
Toluene	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/19/21 16:40	03/21/21 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	99		70 - 130				03/19/21 16:40	03/21/21 15:56	1
4-Bromofluorobenzene	101		70 - 130				03/19/21 16:40	03/21/21 15:56	1
Method: CHLORIDE E300 -	General Subc	ontract Me	ethod						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	523		4.99		mg/kg		03/18/21 22:00	03/19/21 09:33	1
Method: TPH 8015 NM MC	D - General S	ubcontrac	t Method						
Analyte – –	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 05:07	1

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Job ID: 890-331-1 SDG: TE012921032

## Lab Sample ID: 890-331-1

Lab Sample ID: 890-331-2

Matrix: Solid

Matrix: Solid

5

3/22/2021

#### Job ID: 890-331-1 SDG: TE012921032

#### Client Sample ID: BH01 A Date Collected: 03/11/21 12:29 Date Received: 03/11/21 16:18

## Lab Sample ID: 890-331-2

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 05:07	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 05:07	1
Total TPH	<50.0	U	50.0		mg/kg		03/15/21 17:00	03/16/21 05:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 135				03/15/21 17:00	03/16/21 05:07	1
o-Terphenyl	106		70 - 135				03/15/21 17:00	03/16/21 05:07	1

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# **Surrogate Summary**

Client: WSP USA Inc. Project/Site: Nash 8 SWD

Method: BTEX 8021 - General Subcontract Method Matrix: SOIL

		Percent Surrogate Recovery (Acceptance Limits)					
		BFB					
_ab Sample ID	Client Sample ID	(70-130)					
723715-1-BKS	Lab Control Sample	104					
723715-1-BLK	Method Blank	111					
7723715-1-BSD	Lab Control Sample Dup	103					
Surrogate Legend							

BFB = 4-Bromofluorobenzene

# Method: BTEX 8021 - General Subcontract Method Matrix: Solid

			Percen	t Surrogate Recovery (Acceptance Limits)
		BFB	DFBZ	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-331-1	BH01	111	101	
890-331-2	BH01 A	101	99	
Surrogate Legend				
BFB = 4-Bromofluo	robenzene			
DFBZ = 1,4-Difluor	obenzene			

# Method: TPH 8015\_NM\_MOD - General Subcontract Method Matrix: Solid

		Percent Surrogate Recovery (Acceptance Limits)						
		1CO	ОТРН					
Lab Sample ID	Client Sample ID	(70-135)	(70-135)					
890-331-1	BH01	86	94					
890-331-2	BH01 A	97	106					

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

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Job ID: 890-331-1 SDG: TE012921032

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Lab Sample ID: 7723715-1-BLK

# **QC Sample Results**

Client: WSP USA Inc.

Project/Site: Nash 8 SWD

# Method: BTEX 8021 - General Subcontract Method

Matrix: SOIL	•							Prop Type: T	
Analysis Batch: 3154335							Pre	p Batch: 3154	4335_P
	BLANK	BLANK							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<.002	U	.002		mg/kg		03/19/21 16:40	03/20/21 16:20	1
Ethylbenzene	<.002	U	.002		mg/kg		03/19/21 16:40	03/20/21 16:20	1
m,p-Xylenes	<.004	U	.004		mg/kg		03/19/21 16:40	03/20/21 16:20	1
o-Xylene	<.002	U	.002		mg/kg		03/19/21 16:40	03/20/21 16:20	1
Toluene	<.002	U	.002		mg/kg		03/19/21 16:40	03/20/21 16:20	1
	BLANK	BLANK							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	111		70 - 130				03/19/21 16:40	03/20/21 16:20	1

# Lab Sample ID: 7723715-1-BKS Matrix: SOIL Analysis Batch: 3154335

Analysis Batch: 3154335					Prep Batch: 31543			
-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	.1	0.0986		mg/kg		99	70 - 130	
Ethylbenzene	.1	0.0967		mg/kg		97	71_129	
m,p-Xylenes	.2	0.191		mg/kg		96	70 - 135	
o-Xylene	.1	0.0956		mg/kg		96	71_133	
Toluene	.1	0.0974		mg/kg		97	70 - 130	

	LCS LCS						
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene	104		70 - 130				

# Lab Sample ID: 7723715-1-BSD Matrix: SOIL Analysis Batch: 3154335

### **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA Prep Batch: 3154335 P

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene			.1	0.0945		mg/kg		95	70 - 130	4	35
Ethylbenzene			.1	0.0933		mg/kg		93	71 - 129	4	35
m,p-Xylenes			.2	0.187		mg/kg		94	70 - 135	2	35
o-Xylene			.1	0.0931		mg/kg		93	71 - 133	3	35
Toluene			.1	0.0952		mg/kg		95	70 - 130	2	35
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								

```
4-Bromofluorobenzene
                                         103
                                                            70 - 130
```

# Method: TPH 8015\_NM\_MOD - General Subcontract Method

Lab Sample ID: 7723406-1-BLK Matrix: SOIL Analysis Batch: 3153795		Client Sample ID: Method I Prep Type: Tot Prep Batch: 31537					l Blank otal/NA 3795_P		
	BLANK	BLANK							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50	U	50		mg/kg		03/15/21 17:00	03/15/21 21:07	1
Gasoline Range Hydrocarbons (GRO)	<50	U	50		mg/kg		03/15/21 17:00	03/15/21 21:07	1
Motor Oil Range Hydrocarbons (MRO)	<50	U	50		mg/kg		03/15/21 17:00	03/15/21 21:07	1

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Prep Type: Total/NA

# **QC Sample Results**

# Method: TPH 8015\_NM\_MOD - General Subcontract Method (Continued)

Lab Sample ID: 7723406-1-BKS Matrix: SOIL Analysis Batch: 3153795	Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 3153795_P							mple al/NA '95_P	
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics (DRO)	1000	1080		mg/kg		108	70 - 135		
Gasoline Range Hydrocarbons (GRO)	1000	1030		mg/kg		103	70 - 135		
Lab Sample ID: 7723406-1-BSD			C	Client Sa	mple	ID: Lab		Sample	Dup
Analysis Batch: 3153795						Pi	ep Batch	: 31537	'95_P
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics (DRO)	1000	1090		mg/kg		109	70 - 135	1	20
Gasoline Range Hydrocarbons	1000	1110		mg/kg		111	70 - 135	7	20

(GRO)

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**Eurofins Carlsbad** 

# **QC Association Summary**

Client: WSP USA Inc. Project/Site: Nash 8 SWD

# Subcontract

# Analysis Batch: 3153795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-331-1	BH01	Total/NA	Solid	TPH	3153795_P
				8015_NM_MOD	
890-331-2	BH01 A	Total/NA	Solid	TPH	3153795_P
				8015_NM_MOD	
7723406-1-BLK	Method Blank	Total/NA	SOIL	TPH	3153795_P
				8015_NM_MOD	
7723406-1-BKS	Lab Control Sample	Total/NA	SOIL	TPH	3153795_P
				8015_NM_MOD	
7723406-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	TPH	3153795_P
				8015 NM MOD	

# Analysis Batch: 3154287

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-331-1	BH01	Total/NA	Solid	CHLORIDE E300	3154287_P
890-331-2	BH01 A	Total/NA	Solid	CHLORIDE E30(	3154287_P

# Analysis Batch: 3154335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-331-1	BH01	Total/NA	Solid	BTEX 8021	3154335_P
890-331-2	BH01 A	Total/NA	Solid	BTEX 8021	3154335_P
7723715-1-BLK	Method Blank	Total/NA	SOIL	BTEX 8021	3154335_P
7723715-1-BKS	Lab Control Sample	Total/NA	SOIL	BTEX 8021	3154335_P
7723715-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	BTEX 8021	3154335_P

# Prep Batch: 3153795\_P

Lab Sample ID	Client Sample ID		Matrix	Method	Prep Batch
090-331-1		Total/NA	Solid	SW6015P	
890-331-2	BH01 A	Total/NA	Solid	SW8015P	
7723406-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723406-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723406-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	

# Prep Batch: 3154287\_P

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-331-1	BH01	Total/NA	Solid	E300P	
890-331-2	BH01 A	Total/NA	Solid	E300P	

# Prep Batch: 3154335\_P

Lab Sample ID 890-331-1	Client Sample ID BH01	Prep Type Total/NA	Matrix Solid	Method SW5035A	Prep Batch
890-331-2	BH01 A	Total/NA	Solid	SW5035A	
7723715-1-BLK	Method Blank	Total/NA	SOIL	SW5035A	
7723715-1-BKS	Lab Control Sample	Total/NA	SOIL	SW5035A	
7723715-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW5035A	

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# Job ID: 890-331-1 SDG: TE012921032

2/22/220

	Accicultation	ocruncation ouninary		
Client: WSP USA Inc.			Job ID: 890-331-1	
Project/Site: Nash 8 SWD			SDG: TE012921032	2
Laboratory: Eurofins Mic	lland			2
The accreditations/certifications listed	below are applicable to this report.			
Authority	Program	Identification Number	Expiration Date	
Texas	NELAP	T104704400-20-21	06-30-21	5
				8
				9
				40
				13

# **Method Summary**

# Client: WSP USA Inc. Project/Site: Nash 8 SWD

Job ID: 890-331-1 SDG: TE012921032

Method	Method Description	Protocol	Laboratory
Subcontract	BTEX 8021	None	XM
Subcontract	CHLORIDE E300	None	XM
Subcontract	TPH 8015_NM_MOD	None	XM

### Protocol References:

None = None

### Laboratory References:

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

Eurofins Carlsbad

Client: WSP USA Inc. Project/Site: Nash 8 SWD

Job ID: 890-331-1 SDG: TE012921032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-331-1	BH01	Solid	03/11/21 12:21	03/11/21 16:18	
890-331-2	BH01 A	Solid	03/11/21 12:29	03/11/21 16:18	

σ ω. 	Relinquished by: (Signature)	Project Number:       TE01292         Project Number:       Eddy         Sampler's Name:       William M         SAMPLE RECEIPT       Temp Blank         Temperature (°C):       I.e.         Received Intact:       Yes         Sample Custody Seals:       Yes         Sample Custody Seals:       Yes         BH01       S         BH01       S         BH01A       S         BH01A       S         Circle Method(s) and Matrix       S         Circle Method(s) and Matal(s) to ba and or service. Xenco will be lable only for the cost of sample of string of st	Project Name: Nash 8 S	Phone: (432) 236-3849	City, State ZIP: Midland, Tx 79705	Address: 3300 North A Street	Company Name: WSP USA Inc., Permia	Project Manager: Dan Moir	LABORATORIES
	Received by (Signature)	1032     Routine       1032     Routine       Iather     Due Date:       Rush: A M/ (C)       Thermometer ID       Date       Total Containers:       Sampled       Sampled       J11/2021       12:29       3/11/2021       12:29       3/11/2021       12:29       3/11/2021       12:29       11/2021 </th <th>SWD Turn Around</th> <th>Email: will.mather@wsp.</th> <th>City, State ZIP:</th> <th>Address:</th> <th>an office Company Name:</th> <th>Bill to: (if different)</th> <th>Houston,TX (281) 240-4200 Midland,TX (432-704-5440 Hobbs,NM (575-392-7550) Phoenix,AZ</th>	SWD Turn Around	Email: will.mather@wsp.	City, State ZIP:	Address:	an office Company Name:	Bill to: (if different)	Houston,TX (281) 240-4200 Midland,TX (432-704-5440 Hobbs,NM (575-392-7550) Phoenix,AZ
0 1	Date/Time Relinquished	A Sb As Ba Be B Cd Ca Cr Co Cu Emilares Incurred by the client if such in the such is the	ANALY	.com, dan.moir@wsp.com			XTO Energy	Kyle Littrell	Chain of Custody Dallas,TX (214) 902-0300 San Antonio,TX (21 )) EL Paso,TX (915)585-3443 Lubbock,TX (800) (480-355-0900) Atlanta,GA (770-449-8800) Ti
	by: (Signature) Received by: (Sig	ain of Custody Tain of Custody Cu Fe Pb Mg Mn Mo Ni K Se Ag Si Sactors. It assigns standard terms and conditions pases are due to circumstances beyond the control antibe enforced unless previously negotiated.	SIS REQUEST	Deliverables: EDD	Reporting:Level II evel III	State of Project:	Program: UST/PSTRP]	Work Or	Work Orde 10) 509-3334 6)794-1296 ampa,FL (813-620-2000) <u>www.xenco.</u>
Revised Date 051418 Rev. 2018 1	nature) Date/Time	Incident ID: nAPP2105537640 Cost Center: 1653621001 API : 30-015-41351 TAT starts the day received by the lab, if received by 4:30pm Sample Comments Discrete Discrete Discrete	Work Order Notes	DaPT Other:			ownfields IRC Derfund	ler Comments	r No:

# Received by OCD: 5/11/2021 1:28:07 PM



# Login Sample Receipt Checklist

Client: WSP USA Inc.

# Login Number: 331 List Number: 1 Creator: Clifton, Cloe

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	

N/A

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

13

### Job Number: 890-331-1 SDG Number: TE012921032

List Source: Eurofins Carlsbad



Environment Testing America

# ANALYTICAL REPORT

Job Number: 890-569-1 SDG Number: TE012921032 Job Description: Nash Draw 8

For: WSP USA Inc. 2777 N. Stemmons Freeway Suite 1600 Dallas, TX 75207 Attention: Dan Moir

AMER

Approved for release Jessica Kramer Project Manager 4/26/2021 6:44 PM

Jessica Kramer, Project Manager 1211 W. Florida Ave, Midland, TX, 79701 jessica.kramer@eurofinset.com 04/26/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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.

Eurofins Xenco, Carlsbad 1089 N Canal St., Carlsbad, NM 88220 Tel (575) 988-3199 Fax (575) 988-3199 <u>www.EurofinsUS.com</u>



# Received by OCD: 5/11/2021 1:28:07 PM

# **Client Sample Result Summary**

Client: WSP USA Inc.

Diesel Range Organics (Over

Oll Range Organics (Over

C10-C28)

C28-C36) Total TPH

Analyte

Chloride

<49.9 U

<49.9 U

<49.9 U

Analyzed: 04/26/2021 15:29

417

Method: 300.0 - Anions, Ion Chromatography - Soluble

Unit/RL: mg/Kg

Prepared:

49.9

49.9

49.9

RL

5.04

Inh ID: 890-569-1

Page 47 of 74

JOD ID: 890-
SDG: TE01292

Project/Site: Nash Draw 8										SDG: TEC	)12921032	
Lab Sample	ID: 890-56	890-569-1		890-569-2		890-569-3		890-569-4		890-569-5		
Client Sample	ID: BH02	BH02		BH02 A		BH03		BH03 A		BH04		
De	oth: 0.5			1		0.5		1		0.5		
Mat	rix: Solid			Solid		Solid		Solid		Solid		
Date Collect	ed: 04/23/2	021 10	:25	04/23/2021 1	0:30	04/23/2021 1	0:40	04/23/2021 1	0:45	04/23/2021 1	1:00	
Method: 8021B - Volatile	Organic C	ompo	ounds (G	C)								
Prepa	ed: 04/26/2	021 08	:44	04/26/2021 0	8:44	04/26/2021 0	8:44	04/26/2021 0	8:44	04/26/2021 08:44		
Analyz	ed: 04/26/2	021 12	:49	04/26/2021 1	3:10	04/26/2021 1	04/26/2021 13:30		3:51	04/26/2021 14:11		
Analyte Unit/	RL: mg/Kg		RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	
Benzene	< 0.001	99 U	0.00199	<0.00199 U	0.00199	0.00677	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200	
Toluene	<0.001	99 U	0.00199	<0.00199 U	0.00199	0.00998	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200	
Ethylbenzene	0.0025	2	0.00199	<0.00199 U	0.00199	0.0118	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200	
m-Xylene & p-Xylene	< 0.003	98 U	0.00398	<0.00398 U	0.00398	<0.00396 U	0.00396	<0.00400 U	0.00400	<0.00399 U	0.00399	
o-Xylene	< 0.001	99 U	0.00199	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200	
Xylenes, Total	< 0.003	98 U	0.00398	<0.00398 U	0.00398	<0.00396 U	0.00396	<0.00400 U	0.00400	<0.00399 U	0.00399	
Total BTEX	< 0.003	98 U	0.00398	<0.00398 U	0.00398	0.0286	0.00396	<0.00400 U	0.00400	<0.00399 U	0.00399	
Method: 8015B NM - Dies	el Range	Orgar	nics (DRC	D) (GC)								
Prepa	ed: 04/26/2	021 08	:55	04/26/2021 0	8:55	04/26/2021 0	8:55	04/26/2021 0	8:55	04/26/2021 0	8:55	
Analyz	ed: 04/26/2	021 11	:45	04/26/2021 1	2:50	04/26/2021 13:12		04/26/2021 13:34		04/26/2021 13:55		
Analyte Unit/	RL: mg/Kg		RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	
Gasoline Range Organics (GRO)-C6-C10	<49.9 L	J	49.9	<49.9 U	49.9	<49.8 U	49.8	<49.9 U	49.9	<50.0 U	50.0	

<49.9 U

<49.9 U

<49.9 U

mg/Kg

164

04/26/2021 15:34

49.9

49.9

49.9

RL

4.97

<49.8 U

<49.8 U

<49.8 U

mg/Kg

29.4

04/26/2021 15:49

49.8

49.8

49.8

RL

4.95

<49.9 U

<49.9 U

<49.9 U

mg/Kg

31.8

04/26/2021 15:55

49.9

49.9

49.9

RL

5.05

<50.0 U

<50.0 U

<50.0 U

mg/Kg

390

04/26/2021 16:00

50.0

50.0

50.0

RL

5.05

# Received by OCD: 5/11/2021 1:28:07 PM

# **Client Sample Result Summary**

Client: WSP USA Inc. Project/Site: Nash Draw 8

Lab Sample ID:	890-569-6	890-569-7	890-569-8
Client Sample ID:	BH04 A	BH05	BH05A
Depth:	1	0.5	1
Matrix:	Solid	Solid	Solid
Date Collected:	04/23/2021 11:05	04/23/2021 11:15	04/23/2021 11:20

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

	Prepared:	04/26/2021 08:44		04/26/2021 08	:44	04/26/2021 08:44		
	Analyzed:	04/26/2021 14	:32	04/26/2021 14	:53	04/26/2021 15:13		
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	
Benzene		<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00199 U	0.00199	
Toluene		<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00199 U	0.00199	
Ethylbenzene		<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00199 U	0.00199	
m-Xylene & p-Xylene		<0.00404 U	0.00404	<0.00403 U	0.00403	<0.00398 U	0.00398	
o-Xylene		<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00199 U	0.00199	
Xylenes, Total		<0.00404 U	0.00404	<0.00403 U	0.00403	<0.00398 U	0.00398	
Total BTEX		<0.00404 U	0.00404	<0.00403 U	0.00403	<0.00398 U	0.00398	

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

	Prepared:	04/26/2021 08:55		04/26/2021 08	:55	04/26/2021 08:55		
	Analyzed:	04/26/2021 14	:17	04/26/2021 14:38		04/26/2021 15:00		
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	
Gasoline Range Organica (GRO)-C6-C10	S	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	
Diesel Range Organics ( C10-C28)	Over	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	
Oll Range Organics (Ove C28-C36)	er	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	
Total TPH		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	

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

	Prepared:						
	Analyzed:	04/26/2021 1	6:05	04/26/2021 16	5:10	04/26/2021 16	6:15
Analyte	Unit/RL:	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		478	4.98	471	5.00	460	5.00

Job ID: 890-569-1 SDG: TE012921032 Received by OCD: 5/1/2021 1:28:07 PM

# 🔅 eurofins

# Environment Testing America

# **ANALYTICAL REPORT**

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

# Laboratory Job ID: 890-569-1

Laboratory Sample Delivery Group: TE012921032 Client Project/Site: Nash Draw 8

# For:

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

Attn: Dan Moir

RAMER

Authorized for release by: 4/26/2021 6:44:52 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.

LINKS **Review your project** results through Total Access Have a Question? Ask-The Expert Visit us at: www.eurofinsus.com/Env Released to Imaging: 8/18/2021 2:26:28 PM

Laboratory Job ID: 890-569-1 SDG: TE012921032

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Client: WSP US Project/Site: Na	SA Inc. ash Draw 8	Job ID: 890-569-1 SDG: TE012921032	i
Qualifiers			Ē
Qualifier	Qualifier Description		
<u>S1+</u>	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC	Quelifier Description		
	Qualifier Description		
0			
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		

Presumptive

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

PRES

QC

RL

RPD TEF

TEQ TNTC

RER

**Case Narrative** 

Client: WSP USA Inc. Project/Site: Nash Draw 8

# Job ID: 890-569-1

# Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-569-1

## Receipt

The samples were received on 4/23/2021 1:14 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.8°C

## **Receipt Exceptions**

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH02 (890-569-1), BH02 A (890-569-2), BH03 (890-569-3), BH03 A (890-569-4), BH04 (890-569-5), BH04 A (890-569-6), BH05 (890-569-7) and BH05A (890-569-8).

## GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH02 (890-569-1), BH02 A (890-569-2), BH03 (890-569-3) and BH03 A (890-569-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### GC Semi VOA

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.

# Lab Sample ID: 890-569-1

Matrix: Solid

5

Client Sample ID: BH02 Date Collected: 04/23/21 10:25

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Date Received: 04/23/21 13:14 Sample Depth: - 0.5

Method: 8021B - Volatile Orga	nic Compounds	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
Ethylbenzene	0.00252		0.00199	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 12:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			04/26/21 08:44	04/26/21 12:49	1
1,4-Difluorobenzene (Surr)	105		70 - 130			04/26/21 08:44	04/26/21 12:49	1
- Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Casolino Pango Organico		11	0.01	ma/Ka		04/26/21 08:55	04/26/21 11:45	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg	04/26/21 08:55	04/26/21 11:45	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	04/26/21 08:55	04/26/21 11:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg	04/26/21 08:55	04/26/21 11:45	1
(GRO)-C6-C10							
easemie hange eigeniee		-			•	•	

Surrogate	%Recovery	Quaimer	Limits	Prepared	Analyzed	Dii Fac
1-Chlorooctane	100		70 - 130	04/26/21 08:55	04/26/21 11:45	1
o-Terphenyl	114		70 - 130	04/26/21 08:55	04/26/21 11:45	1
-						

Method: 300.0 - Anions, Ion Chrom	atography - S	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	417		5.04	mg/Kg			04/26/21 15:29	1

# Client Sample ID: BH02 A Date Collected: 04/23/21 10:30 Date Received: 04/23/21 13:14

Sample Depth: - 1

Lab Sample ID: 890-569-2 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
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
Toluene
                                              <0.00199 U
                                                                          0.00199
                                                                                                 mg/Kg
                                                                                                                     04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
Ethylbenzene
                                              <0.00199 U
                                                                          0.00199
                                                                                                 mg/Kg
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
m-Xylene & p-Xylene
                                                                          0.00398
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                              <0.00398 U
                                                                                                 mg/Kg
                                                                                                                                                              1
o-Xylene
                                              <0.00199 U
                                                                          0.00199
                                                                                                 mg/Kg
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
Xylenes, Total
                                              <0.00398 U
                                                                          0.00398
                                                                                                 mg/Kg
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
Total BTEX
                                              <0.00398 U
                                                                          0.00398
                                                                                                 mg/Kg
                                                                                                                     04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
                                            %Recovery Qualifier
                                                                         Limits
                                                                                                                                                        Dil Fac
Surrogate
                                                                                                                       Prepared
                                                                                                                                        Analyzed
4-Bromofluorobenzene (Surr)
                                                   111
                                                                        70 - 130
                                                                                                                    04/26/21 08:44
                                                                                                                                     04/26/21 13:10
                                                                                                                                                              1
                                                                        70 - 130
                                                                                                                     04/26/21 08:44
                                                                                                                                     04/26/21 13:10
1,4-Difluorobenzene (Surr)
                                                   120
                                                                                                                                                              1
```

Lab Sample ID: 890-569-2

Lab Sample ID: 890-569-3

04/26/21 13:30

04/26/21 08:44

Matrix: Solid

# **Client Sample ID: BH02 A**

Date Collected: 04/23/21 10:30 Date Received: 04/23/21 13:14

Sample Depth: -1

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 12:50	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 12:50	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 12:50	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 12:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			04/26/21 08:55	04/26/21 12:50	1
o-Terphenyl	109		70 - 130			04/26/21 08:55	04/26/21 12:50	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	164		4.97	mg/Kg			04/26/21 15:34	1

# **Client Sample ID: BH03**

Date Collected: 04/23/21 10:40 Date Received: 04/23/21 13:14 Sample Depth: - 0.5

1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Orga	nic Compounds (	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00677		0.00198	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
Toluene	0.00998		0.00198	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
Ethylbenzene	0.0118		0.00198	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
Total BTEX	0.0286		0.00396	mg/Kg		04/26/21 08:44	04/26/21 13:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	252	S1+	70 - 130			04/26/21 08:44	04/26/21 13:30	1

70 - 130

126

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac <49.8 U 04/26/21 08:55 Gasoline Range Organics 49.8 mg/Kg 04/26/21 13:12 1 (GRO)-C6-C10 <49.8 U 49.8 04/26/21 08:55 04/26/21 13:12 **Diesel Range Organics (Over** mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <49.8 U 49.8 mg/Kg 04/26/21 08:55 04/26/21 13:12 1 Total TPH mg/Kg 04/26/21 08:55 04/26/21 13:12 <49.8 U 49.8 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 1-Chlorooctane 70 - 130 04/26/21 08:55 04/26/21 13:12 93 1 o-Terphenyl 101 70 - 130 04/26/21 08:55 04/26/21 13:12 1 Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL Unit Dil Fac D Prepared Analyzed 4.95 Chloride 29.4 mg/Kg 04/26/21 15:49 1

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Matrix: Solid

5

# 1

1

Released to Imaging: 8/18/2021 2:26:28 PM

# Lab Sample ID: 890-569-4

Matrix: Solid

Client Sample ID: BH03 A Date Collected: 04/23/21 10:45 Date Received: 04/23/21 13:14

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Sample Depth: - 1
Method: 8021B - Volatile Organic Compounds (GC)

Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 13:51	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
109		70 - 130			04/26/21 08:44	04/26/21 13:51	1
115		70 - 130			04/26/21 08:44	04/26/21 13:51	1
	Result           <0.00200	Result         Qualifier           <0.00200	Result         Qualifier         RL           <0.00200	Result         Qualifier         RL         Unit           <0.00200	Result         Qualifier         RL         Unit         D           <0.00200	ResultQualifierRLUnitDPrepared<0.00200	ResultQualifierRLUnitDPreparedAnalyzed<0.00200

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 13:34	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 13:34	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 13:34	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	04/26/21 08:55	04/26/21 13:34	1
o-Terphenyl	97		70 - 130	04/26/21 08:55	04/26/21 13:34	1

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.8	5.05	mg/Kg			04/26/21 15:55	1

# Client Sample ID: BH04

Date Collected: 04/23/21 11:00 Date Received: 04/23/21 13:14

Sample Depth: - 0.5

# Lab Sample ID: 890-569-5

Matrix: Solid

Method: 8021B - Volatile Orga	inic Compounds	( <b>GC</b> )						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			04/26/21 08:44	04/26/21 14:11	1
1,4-Difluorobenzene (Surr)	117		70 - 130			04/26/21 08:44	04/26/21 14:11	1

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Job ID: 890-569-1 SDG: TE012921032

Matrix: Solid

Lab Sample ID: 890-569-5

04/26/21 16:00

Lab Sample ID: 890-569-6

04/26/21 14:32

04/26/21 08:44

# **Client Sample ID: BH04**

Date Collected: 04/23/21 11:00 Date Received: 04/23/21 13:14

Sample Depth: - 0.5

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 13:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 13:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 13:55	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 13:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			04/26/21 08:55	04/26/21 13:55	1
o-Terphenyl	102		70 - 130			04/26/21 08:55	04/26/21 13:55	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

5.05

mg/Kg

L	Chloride			

# **Client Sample ID: BH04 A**

Date Collected: 04/23/21 11:05 Date Received: 04/23/21 13:14 Sample Depth: -1

1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Orga	inic Compounds	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
Total BTEX	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			04/26/21 08:44	04/26/21 14:32	1

70 - 130

	004ED	NM Discol	Dener	0		(00)
wethou.	00130	NW - Diesei	Range	Organics	(DRO)	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:17	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:17	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:17	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Surrogate 1-Chlorooctane	93	Qualifier	Limits 70 - 130			Prepared 04/26/21 08:55	Analyzed 04/26/21 14:17	Dil Fac
Surrogate 1-Chlorooctane o-Terphenyl	93 200	Qualifier	Limits 70 - 130 70 - 130			Prepared 04/26/21 08:55 04/26/21 08:55	Analyzed 04/26/21 14:17 04/26/21 14:17	<b>Dil Fac</b> 1 1
Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 93 100	Qualifier	Limits 70 - 130 70 - 130			Prepared 04/26/21 08:55 04/26/21 08:55	Analyzed 04/26/21 14:17 04/26/21 14:17	<u>Dil Fac</u> 1 1
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	- <u>%Recovery</u> 93 100 matography -	Qualifier Soluble	Limits 70 - 130 70 - 130			<b>Prepared</b> 04/26/21 08:55 04/26/21 08:55	Analyzed 04/26/21 14:17 04/26/21 14:17	Dil Fac 1 1
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro Analyte	<u>%Recovery</u> 93 100 matography - Result	Qualifier Soluble Qualifier	Limits 70 - 130 70 - 130 RL	Unit	D	Prepared 04/26/21 08:55 04/26/21 08:55 Prepared	Analyzed 04/26/21 14:17 04/26/21 14:17 Analyzed	Dil Fac

# Eurofins Xenco, Carlsbad

5

1

1

Matrix: Solid

Released to Imaging: 8/18/2021 2:26:28 PM

390

# Lab Sample ID: 890-569-7

Matrix: Solid

5

Date Collected: 04/23/21 11:15 Date Received: 04/23/21 13:14

**Client Sample ID: BH05** 

Sample Depth: - 0.5

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Method: 8021B - Volatile Orga	nic Compounds	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		04/26/21 08:44	04/26/21 14:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			04/26/21 08:44	04/26/21 14:53	1
1,4-Difluorobenzene (Surr)	95		70 - 130			04/26/21 08:44	04/26/21 14:53	1
Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:38	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 14:38	1

50.0

50.0

RL

5.00

Limits

70 - 130

70 - 130

mg/Kg

mg/Kg

Unit

mg/Kg

04/26/21 08:55

04/26/21 08:55

Prepared

04/26/21 08:55

04/26/21 08:55

Prepared

D

04/26/21 14:38

04/26/21 14:38

Analyzed

04/26/21 14:38

04/26/21 14:38

Analyzed

04/26/21 16:10

Lab Sample ID: 890-569-8

Dil Fac

Dil Fac

Matrix: Solid

1

1

1

<50.0 U

<50.0 U

%Recovery Qualifier

94

103

471

Result Qualifier

Chloride
Client Sample ID: BH05A

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 04/23/21 11:20 Date Received: 04/23/21 13:14

Oll Range Organics (Over C28-C36)

Sample Depth: - 1

C10-C28)

Total TPH

Surrogate

o-Terphenyl

Analyte

1-Chlorooctane

Method: 8021B - Volatile Orga	nic Compounds (	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 15:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			04/26/21 08:44	04/26/21 15:13	1
1,4-Difluorobenzene (Surr)	102		70 - 130			04/26/21 08:44	04/26/21 15:13	1

# **Client Sample Results**

Job ID: 890-569-1 SDG: TE012921032

Lab Sample ID: 890-569-8

# **Client Sample ID: BH05A**

Date Collected: 04/23/21 11:20 Date Received: 04/23/21 13:14

Sample Depth: -1

Client: WSP USA Inc.

Project/Site: Nash Draw 8

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 15:00	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 15:00	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 15:00	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 08:55	04/26/21 15:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			04/26/21 08:55	04/26/21 15:00	1
o-Terphenyl	105		70 - 130			04/26/21 08:55	04/26/21 15:00	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		5.00	mg/Kg			04/26/21 16:15	1

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Matrix: Solid

Client: WSP USA Inc. Project/Site: Nash Draw 8

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

Percent Surrogate Recovery (Acceptance Limits) BFB1 DFBZ1 Lab Sample ID Client Sample ID (70-130) (70-130) 890-569-1 BH02 101 105 890-569-2 BH02 A 111 120 890-569-3 BH03 252 S1+ 126 890-569-4 BH03 A 109 115 890-569-5 BH04 109 117 BH04 A 890-569-6 93 109 890-569-7 BH05 93 95 890-569-8 BH05A 97 102 LCS 880-2314/1-A Lab Control Sample 94 111 LCSD 880-2314/2-A Lab Control Sample Dup 95 107 MB 880-2314/5-A Method Blank 106 85 Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

### Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-569-1	BH02	100	114	
890-569-1 MS	BH02	99	96	
890-569-1 MSD	BH02	100	100	
890-569-2	BH02 A	98	109	
890-569-3	BH03	93	101	
890-569-4	BH03 A	89	97	
890-569-5	BH04	93	102	
890-569-6	BH04 A	93	100	
890-569-7	BH05	94	103	
890-569-8	BH05A	99	105	
LCS 880-2316/2-A	Lab Control Sample	98	101	
LCSD 880-2316/3-A	Lab Control Sample Dup	97	100	
MB 880-2316/1-A	Method Blank	88	99	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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# Job ID: 890-569-1 SDG: TE012921032

Prep Type: Total/NA

Prep Type: Total/NA

# **QC Sample Results**

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-231	4/5-A					Client Sa	mple ID: Metho	d Blank
Matrix: Solid							Prep Type: 1	Total/NA
Analysis Batch: 2315							Prep Bate	ch: 2314
		MB MB						
Analyte	Re	sult Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00	200 U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00	200 U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00	200 U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00	400 U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00	200 U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00	400 U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00	400 U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
		MB MB						
Surrogate	%Recov	very Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		106	70 - 130			04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)		85	70 - 130			04/26/21 08:44	04/26/21 12:07	1
- Lab Sample ID: LCS 880-23	14/1-A				c	lient Sample I	D: Lab Control	Sample
Matrix: Solid							Prep Type: 1	Fotal/NA
Analysis Batch: 2315							Prep Bate	ch: 2314
	LCS	LCS						
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	94		70 - 130					
1,4-Difluorobenzene (Surr)	111		70 - 130					
Lab Sample ID: LCSD 880-2	314/2-A				Client	: Sample ID: La	b Control Sam	ple Dup
Matrix: Solid						- The second sec	Prep Type: 1	Total/NA
Analysis Batch: 2315							Prep Bate	ch: 2314
	LCSD	LCSD						
Surrogate	%Recovery	Qualifier	Limits					
A Bromofluorobenzene (Surr)			70 120					
4-Biomonuorobenzene (Sun)	95		70 - 130					

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

Lab Sample ID: MB 880-2316/1-A Matrix: Solid Analysis Batch: 2308						Client Sa	mple ID: Metho Prep Type: 1 Prep Bato	d Blank Fotal/NA ch: 2316
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 10:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 10:40	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 10:40	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 08:55	04/26/21 10:40	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			04/26/21 08:55	04/26/21 10:40	1
o-Terphenyl	99		70 - 130			04/26/21 08:55	04/26/21 10:40	1

# **QC Sample Results**

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

							Client	• •		entrel C	
Lab Sample ID: LCS 880-2316/2 Matrix: Solid	<b>-</b> A						Clien	t Sampi	e ID: Lab C	Untrol 5	
Matrix: Solid									Prep	n Potob	(al/NA
Analysis Batch. 2300			Spiko	201	1.09				% Poc	рваю	. 2310
Analyta			Spike Addad	Beault	LUS	Unit		% Boo	%Rec.		
			Audeu	005.7	Quaimer		<u> </u>	100	70 120		
(GRO)-C6-C10			1000	555.7		mg/rtg		100	70 - 130		
Diesel Range Organics (Over			1000	942.9		ma/Ka		94	70 - 130		
C10-C28)						5 5					
	1.00										
Summe mete	LUS % December 10	LUS	Linsita								
		Quaimer									
o Ternhenvi	90 101		70 - 130								
0-Terphenyi	101		70 - 130								
Lab Sample ID: LCSD 880-2316	/3-A					Clie	nt San	nple ID:	Lab Contro	ol Samol	e Dun
Matrix: Solid						••			Pren	Type: To	tal/NΔ
Analysis Batch: 2308									Dro	n Batch	. 2316
Analysis Baton. 2000			Snike	LCSD	LCSD				%Rec.	p Baten	RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	995 1		 mg/Ka	— <u>-</u>	100	70 - 130	0	20
(GRO)-C6-C10			1000	000.1						Ŭ	20
Diesel Range Organics (Over			1000	944.7		mg/Kg		94	70 - 130	0	20
C10-C28)											
	1000	1000									
Surrogata	V Basavaru	Qualifiar	Limita								
	<sup>07</sup>	Quaimer									
o Ternhenvl	97 100		70 - 130								
o-reiphenyi	100		70 - 130								
Lab Sample ID: 890-569-1 MS									Client Sa	mple ID:	BH02
Matrix: Solid									Pren <sup>*</sup>	Type: To	tal/NA
Analysis Batch: 2308									Pro	n Batch	. 2316
Analysis Baton. 2000	Sample	Sample	Snike	MS	MS				%Rec	p Baton	. 2010
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<49.9	U	998	1012				101	70 - 130		
(GRO)-C6-C10		•							101100		
Diesel Range Organics (Over	<49.9	U	998	936.9		mg/Kg		94	70 - 130		
C10-C28)											
	Me	MS									
Surrogate	WD	Qualifiar	Limite								
1-Chlorooctane		guainter	70 120								
o-Tembenyl	99		70 - 130								
o-reipnenyi	90		10 - 130								
Lab Sample ID: 890-569-1 MSD									Client Sa	mple ID:	BH02
Matrix: Solid									Pren	Type: To	tal/NA
Analysis Batch: 2308									Pre	n Batch	2316
	Sample	Sample	Spike	MSD	MSD				%Rec.	p Daton	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	<u>U</u>	998	1045		 mg/Kg		105	70 - 130	3	
(GRO)-C6-C10	0.0	5	000	1040				100	10-100	0	20
Diesel Range Organics (Over	<49.9	U	998	979.2		mg/Kg		98	70 - 130	4	20
C10-C28)											
	1100	MED									
Summe mete	MSD % Decision	NISU	1 inc it -								
	%Recovery	Qualifier									
	21/1/1										

Client: WSP USA Inc.

Project/Site: Nash Draw 8

# Job ID: 890-569-1 SDG: TE012921032

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

		<u> </u>		<u> </u>								
Lab Sample ID: 890-569-1 MSD										Client Sar	nple ID:	BH02
Analysis Batch: 2209										Prepro	ype. To n Batab	· 2246
Analysis Batch. 2300										FIE	p Batch	. 2310
	MSD MS	SD										
Surrogate	%Recovery Qu	alifier	Limits	_								
o-Terphenyl	100		70 - 130									
Method: 300.0 - Anions, Ion	Chromatog	raphy										
Lab Sample ID: MB 880-2317/1-4	<b>x</b>								Client S	Sample ID:	Method	Blank
Matrix: Solid										Prep	Type: S	oluble
Analysis Batch: 2343												
	M	В МВ										
Analyte	Resu	t Qualifier		RL		Unit		D	Prepared	Analyz	ed	Dil Fac
Chloride	<5.0	U		5.00		mg/K	g			04/26/21	13:47	1
- Lab Sample ID: LCS 880-2317/2-	A							Clier	nt Sample	D: Lab Co	ontrol S	ample
Matrix: Solid										Prep	Type: S	oluble
Analysis Batch: 2343												
			Spike		LCS	LCS				%Rec.		
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250		252.3		mg/Kg		101	90 - 110		
Lab Sample ID: LCSD 880-2317	3-A						Cli	ent Sa	mple ID:	Lab Contro	I Sampl	le Dup
Matrix: Solid									-	Prep	Type: S	oluble
Analysis Batch: 2343												
-			Spike		LCSD	LCSD				%Rec.		RPD
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chloride			250		252.4		mg/Kg		101	90 - 110	0	20

# **QC Association Summary**

Client: WSP USA Inc. Project/Site: Nash Draw 8

4 5 6

# Job ID: 890-569-1 SDG: TE012921032

GC VOA

# Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-569-1	BH02	Total/NA	Solid	5035	
890-569-2	BH02 A	Total/NA	Solid	5035	
890-569-3	BH03	Total/NA	Solid	5035	
890-569-4	BH03 A	Total/NA	Solid	5035	
890-569-5	BH04	Total/NA	Solid	5035	
890-569-6	BH04 A	Total/NA	Solid	5035	
890-569-7	BH05	Total/NA	Solid	5035	
890-569-8	BH05A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

# Analysis Batch: 2315

090-009-7	BHUD	TO(al/INA	Solid	5035		
890-569-8	BH05A	Total/NA	Solid	5035		8
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035		
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035		9
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035		
– Analysis Batch: 2315						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-569-1	BH02	Total/NA	Solid	8021B	2314	
890-569-2	BH02 A	Total/NA	Solid	8021B	2314	
890-569-3	BH03	Total/NA	Solid	8021B	2314	
890-569-4	BH03 A	Total/NA	Solid	8021B	2314	40
890-569-5	BH04	Total/NA	Solid	8021B	2314	13
890-569-6	BH04 A	Total/NA	Solid	8021B	2314	
890-569-7	BH05	Total/NA	Solid	8021B	2314	
890-569-8	BH05A	Total/NA	Solid	8021B	2314	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314	

# GC Semi VOA

# Analysis Batch: 2308

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-569-1	BH02	Total/NA	Solid	8015B NM	2316
890-569-2	BH02 A	Total/NA	Solid	8015B NM	2316
890-569-3	BH03	Total/NA	Solid	8015B NM	2316
890-569-4	BH03 A	Total/NA	Solid	8015B NM	2316
890-569-5	BH04	Total/NA	Solid	8015B NM	2316
890-569-6	BH04 A	Total/NA	Solid	8015B NM	2316
890-569-7	BH05	Total/NA	Solid	8015B NM	2316
890-569-8	BH05A	Total/NA	Solid	8015B NM	2316
MB 880-2316/1-A	Method Blank	Total/NA	Solid	8015B NM	2316
LCS 880-2316/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2316
LCSD 880-2316/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2316
890-569-1 MS	BH02	Total/NA	Solid	8015B NM	2316
890-569-1 MSD	BH02	Total/NA	Solid	8015B NM	2316

# Prep Batch: 2316

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method Prep B	Batch
890-569-1	BH02	Total/NA	Solid	8015NM Prep	
890-569-2	BH02 A	Total/NA	Solid	8015NM Prep	
890-569-3	BH03	Total/NA	Solid	8015NM Prep	
890-569-4	BH03 A	Total/NA	Solid	8015NM Prep	
890-569-5	BH04	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

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# **QC Association Summary**

Client: WSP USA Inc. Project/Site: Nash Draw 8

GC Semi VOA (Continued)

# Prep Batch: 2316 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-569-6	BH04 A	Total/NA	Solid	8015NM Prep	
890-569-7	BH05	Total/NA	Solid	8015NM Prep	
890-569-8	BH05A	Total/NA	Solid	8015NM Prep	
MB 880-2316/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2316/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2316/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-569-1 MS	BH02	Total/NA	Solid	8015NM Prep	
890-569-1 MSD	BH02	Total/NA	Solid	8015NM Prep	

# HPLC/IC

# Leach Batch: 2317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-569-1	BH02	Soluble	Solid	DI Leach
890-569-2	BH02 A	Soluble	Solid	DI Leach
890-569-3	BH03	Soluble	Solid	DI Leach
890-569-4	BH03 A	Soluble	Solid	DI Leach
890-569-5	BH04	Soluble	Solid	DI Leach
890-569-6	BH04 A	Soluble	Solid	DI Leach
890-569-7	BH05	Soluble	Solid	DI Leach
890-569-8	BH05A	Soluble	Solid	DI Leach
MB 880-2317/1-A	Method Blank	Soluble	Solid	DI Leach
LCS 880-2317/2-A	Lab Control Sample	Soluble	Solid	DI Leach
LCSD 880-2317/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach

# Analysis Batch: 2343

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-569-1	BH02	Soluble	Solid	300.0	2317
890-569-2	BH02 A	Soluble	Solid	300.0	2317
890-569-3	BH03	Soluble	Solid	300.0	2317
890-569-4	BH03 A	Soluble	Solid	300.0	2317
890-569-5	BH04	Soluble	Solid	300.0	2317
890-569-6	BH04 A	Soluble	Solid	300.0	2317
890-569-7	BH05	Soluble	Solid	300.0	2317
890-569-8	BH05A	Soluble	Solid	300.0	2317
MB 880-2317/1-A	Method Blank	Soluble	Solid	300.0	2317
LCS 880-2317/2-A	Lab Control Sample	Soluble	Solid	300.0	2317
LCSD 880-2317/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2317

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# Job ID: 890-569-1 SDG: TE012921032

# Lab Chronicle

Client: WSP USA Inc. Project/Site: Nash Draw 8

# **Client Sample ID: BH02**

Date Collected: 04/23/21 10:25 Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 12:49	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 11:45	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 15:29	SC	XM

# **Client Sample ID: BH02 A** Date Collected: 04/23/21 10:30

Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 13:10	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 12:50	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 15:34	SC	XM

# **Client Sample ID: BH03**

Date Collected: 04/23/21 10:40 Date Received: 04/23/21 13:14

# Lab Sample ID: 890-569-3 Matrix: Solid

Lab Sample ID: 890-569-4

Matrix: Solid

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA 5035 04/26/21 08:44 XM Prep 2314 KL Total/NA Analysis 8021B 2315 04/26/21 13:30 KL XM 1 Total/NA 8015NM Prep 2316 04/26/21 08:55 DM XM Prep Total/NA 04/26/21 13:12 8015B NM 2308 XМ Analysis 1 AJ Soluble DI Leach 04/26/21 09:41 XM Leach 2317 SC XM Soluble Analysis 300.0 2343 04/26/21 15:49 SC 1

# **Client Sample ID: BH03 A** Date Collected: 04/23/21 10:45 Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 13:51	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 13:34	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 15:55	SC	XM

Eurofins Xenco, Carlsbad

Job ID: 890-569-1 SDG: TE012921032

# Lab Sample ID: 890-569-1 Matrix: Solid

Lab Sample ID: 890-569-2

Matrix: Solid

# Lab Chronicle

Client: WSP USA Inc. Project/Site: Nash Draw 8

# **Client Sample ID: BH04**

Date Collected: 04/23/21 11:00 Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 14:11	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 13:55	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 16:00	SC	XM

# **Client Sample ID: BH04 A** Date Collected: 04/23/21 11:05

Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 14:32	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 14:17	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 16:05	SC	XM

# **Client Sample ID: BH05**

### Date Collected: 04/23/21 11:15 Date Received: 04/23/21 13:14

### Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA 5035 04/26/21 08:44 XM Prep 2314 KL Total/NA Analysis 8021B 2315 04/26/21 14:53 KL XM 1 Total/NA 8015NM Prep 2316 04/26/21 08:55 XM Prep DM Total/NA 8015B NM 2308 04/26/21 14:38 ХМ Analysis 1 AJ 04/26/21 09:41 XM Soluble Leach DI Leach 2317 SC XM Soluble Analysis 300.0 2343 04/26/21 16:10 SC 1

# **Client Sample ID: BH05A** Date Collected: 04/23/21 11:20 Date Received: 04/23/21 13:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 15:13	KL	XM
Total/NA	Prep	8015NM Prep			2316	04/26/21 08:55	DM	XM
Total/NA	Analysis	8015B NM		1	2308	04/26/21 15:00	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 16:15	SC	XM

### Laboratory References:

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

Eurofins Xenco, Carlsbad

Job ID: 890-569-1 SDG: TE012921032

# Lab Sample ID: 890-569-5 Matrix: Solid

Lab Sample ID: 890-569-6

Lab Sample ID: 890-569-7

Lab Sample ID: 890-569-8

Matrix: Solid

Matrix: Solid

Matrix: Solid

Accreditation/Certification Summary

Job ID: 890-569-1 SDG: TE012921032

# Laboratory: Eurofins Xenco, Midland

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

Authority	Pi	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-20-21	06-30-21
The following analytes	are included in this report, be	ut the laboratory is not certif	fied by the governing authority. This list ma	ay include analytes fo
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	
the agency does not of Analysis Method	fer certification. Prep Method 0045NM Prep	Matrix	Analyte	
the agency does not of Analysis Method 8015B NM	fer certification . Prep Method 8015NM Prep	Matrix Solid	Analyte Total TPH	

Eurofins Xenco, Carlsbad

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# **Method Summary**

Client: WSP USA Inc. Project/Site: Nash Draw 8

Job ID: 890-569-1 SDG: TE012921032

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

### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

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

Eurofins Xenco, Carlsbad

# Sample Summary

Client: WSP USA Inc. Project/Site: Nash Draw 8

# Job ID: 890-569-1 SDG: TE012921032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-569-1	BH02	Solid	04/23/21 10:25	04/23/21 13:14	- 0.5	A
890-569-2	BH02 A	Solid	04/23/21 10:30	04/23/21 13:14	- 1	
890-569-3	BH03	Solid	04/23/21 10:40	04/23/21 13:14	- 0.5	5
890-569-4	BH03 A	Solid	04/23/21 10:45	04/23/21 13:14	- 1	5
890-569-5	BH04	Solid	04/23/21 11:00	04/23/21 13:14	- 0.5	
890-569-6	BH04 A	Solid	04/23/21 11:05	04/23/21 13:14	- 1	
890-569-7	BH05	Solid	04/23/21 11:15	04/23/21 13:14	- 0.5	
890-569-8	BH05A	Solid	04/23/21 11:20	04/23/21 13:14	- 1	
						8
						9
						12
						13
						14

Eurofins Xenco, Carlsbad

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ns standard terms and conditions	s affiliates and subcontractors. It assign	ent company to Xenco, it	ase order from clie	stitutes a valid purch	t of samples con	document and relinguishmer	Notice: Signature of this
3 Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn Ji Se Ag Ti U 1631/245.1/7470/7471:Hg	B Cd Ca Cr Co Cu Fe Pb Cd Cr Co Cu Pb Mn Mo Ni	Al Sb As Ba Be A Sb As Ba Be	A Texas 11 . 6010: 8RCRA	8RCRA 13PPA TCLP / SPLP	analyzed	010 200.8 / 6020: (s) and Metal(s) to be .	Total 200.7 / 6 Circle Method
		0 ~ ~					
	SU Ula	13110				Merimanolation (and African Levinger, and African Afric	7
E		A A A	A .!	11 20	¢	U	B1-1051
			0.51	SIL			6405
		- 997 		1105			Pho49
			0.9'	0011			PNHS PURS
			-	:045			VEOND
			0.5'	040			COHG
				9201			BNOLA
disc r k		X X X X	1,50	1025	2/24/4	S	LONG
Sample Comments		TPH (E BTEX ( Chlorid	Depth Numb	Time Sampled	ix Date Sampled	ntification Matr	Sample Ide
lab, if received by 4:30pm		PA 8 EPA ie (E	ero	al Containers:	A Tot	als: Yes (No/ N/)	Sample Custody Se
TAT starts the day received by the	-	015) 0=8 PA 3	f Co	ection Factor:	A Con	Is: Yes (No) N/	Cooler Custody Sea
of Custody	890-569 Chain	) 021) 300.(	onta	M-00-1	1-10	(Yes No	Received Intact:
		) 0)	liner	Thermometer ID	ŧ	10,0	Temperature (°C):
			res No	Wet Ice:	1k: Yes, No	EIPT Temp Blar	SAMPLE RECI
				Due Dat	h Naka	Elizabet	Sampler's Name:
			4hr	Rush: 2	ounty	Eddy C	P.O. Number:
				Routine	2032	TEDIZY	Project Number:
EST Work Order Notes	ANALYSIS REQUE		Around	Turn	CC CC	- Nash Dra	Project Name:
Deliverables: EDD ADaPT Other:	wsp.com	<u>/sp.com, dan.moir@</u>	zabeth.naka@w	Email: eli		(432) 236-3849	Phone:
Reporting:Level IIevel IIIBT/UST]RP {[]vel IV]	220	Carlsbad, NM 882	y, State ZIP:	CI		Midland, Tx 79705	City, State ZIP:
State of Project:	nd	522 West Mermo	dress:	Ad		3300 North A Street	Address:
Program: UST/PST _RP _rownfields _RC {perfund		XTO Energy	mpany Name:	0	ian office	WSP USA Inc, Perm	Company Name:
Work Order Comments		Kyle Littrell	I to: (if different)	Bil		Dan Moir	Project Manager:
-szo-zooo) www.xenco.com Page of	;-3443 Lubbock,TX (806)794-1296 1,GA (770-449-8800) Tampa,FL (813-6	EL Paso,TX (915)585 480-355-0900) Atlanta	X (432-704-5440) 50) Phoenix,AZ (	Midland,T bs,NM (575-392-75	Hot	BORATORIES	2
	300 San Antonio,TX (210) 509-3334	Dallas,TX (214) 902-03	(281) 240-4200	Houston,TX	41.51		
Work Order No:	Sustody	Chain of C	•		1251	CAPER 165 362100	Cest
					07145 J	# nAPP 21055	Incident
		3	2	9	7 8	4 5 6	

# Received by OCD: 5/11/2q21 1:28:07 PM



# 1089 N Canal St. **Eurofins Xenco, Carlsbad**

**Chain of Custody Record** 

13



					NELA	ס' -	ouisi	ana	NEL	AP -	Tex	S				í				_	068	1-56	θ <u>-</u> 1							
Address. 1211 W Florida Ave	Due Date Requeste 4/26/2021	ă								nal	sis	Re	Tie I	fe	-						Pre	Serv	atio	2 2	deg	-				
City Midland	TAT Requested (da	iys)			4														1001-1-2	end the	> œ >		т. Т		ママ	Z I	exan yne	, 0		
State, Zip TX 79701	<b>/</b>				<u>handhar</u> San Star	<u>8. 8899-4889-</u>														Bradianth	moc	Nitric	: Adic	<u>-</u> 6	0 77 /		3204 32SO	ώΟŇ		
Phone 432-704-5440(Tel)	PO #				<u>) and</u>	TPH	ie													n. en se	ເດ T	Amd	l or H		1 (0 -		12SO4	- O		
Email	WO#				or No lo)	p Full	Chlori													ji Belataraa		282	ater		<	N A Z	A P	e	anyoi	rate
Project Name: Nash Draw 8	Project #: 89000004				) (Yes is or N	_S_Pre	EACH	EX								<u></u> .			1007799	ainer	- x 	EDT	P		N -	otr P	H 4-E 1er (s	pecif	Y)	
Site:	SSOW#:				ample D (Ye	15NM	)/DI_L	alc B1												l con	Othe	Ť								
				Modulo	ed S S/MS	M/80	_280	P_C								·			- <u>R -CO-</u> 3	er o									1	
			Sample Type	Widtf1X (W=water	ilten m MS	DD_N	RGFM	5035F											-	lumb										
	) - }	Sample	(C=comp,	S=solid, O=waste/oil,	eld F erfor	15M	0_0F	21B/										······································	100 201 3	tal N										
	N	X	Preservat	ion Code:		8	3	8	and the second	T		1000			1			ANU -		(T		10	le	<b> </b>  ä	Ist	Fuc			Ĭ	
BH02 (890-569-1)	4/23/21	10 25 Mountain	and the second se	Solid		×	×	×				-		a decore		2	C.V.	-		÷Į		1		A State		Transfer of the			and the product	
BH02 A (890-569-2)	4/23/21	10 30 Mountain		Solid	_	×	×	×						-			+	$\rightarrow$		*										
BH03 (890-569-3)	4/23/21	10 40 Mountain		Solid	_	×	×	×												é.										
BH03 A (890-569-4)	4/23/21	10 45 Mountain		Solid		×	×	×												÷	Ţ									
BH04 (890-569-5)	4/23/21	11 00 Mountain		Solid		×	×	×							{				100.0	4	T									
BH04 A (890-569-6)	4/23/21	11 05 Mountain		Solid	_	×	×	×				_								an a	T									
BH05 (890-569-7)	4/23/21	11 15 Mountain		Solid		×	×	×										$\rightarrow$		<u> </u>										
BH05A (890-569-8)	4/23/21	11 20 Mountain		Solid		×	×	×													-									
					$\square$																									[
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC maintain accreditation in the State of Origin listed above for analysistests/matrix LLC attention immediately If all requested accreditations are current to date ret	places the ownership being analyzed the s urn the signed Chain (	of method ana amples must be of Custody atter	alyte & accredi e shipped back sting to said co	itation compliar k to the Eurofin omplicance to E	nce upo s Xenco Eurofins	n out s LLC I Xenco	subcor labora	tory o	labora r othe	r instr	i. Thi	s sam s will	ple st be pr	nipme ovide	d. Ar	forwa	ange	unde ; to a	r cha	lin-of	f-cus on st	tody	If the	lid be	> bro	ught	to EL	not cu Irofin	s Xei	nco
Possible Hazard Identification					Sa	mple	Dis	posa	Â	fee	may	18	ISSe	sse		äm	oles		∐ ĝ	line	, pe	ong	er ti	han	1	10	3			
Deliverable Requested 1 II III IV Other (specify)	Primary Delivera	able Rank 2			ş	ecial	Instr	uctio	ins/C	Ĉ R	qui	eme	nts.		ŀ													ľ		
Empty Kit Relinquished by		Date			Time									Met	hod o	of Shi	omer	ā												
Relinquisted by GODAY ORDNEZ	Date/Time:	13/21		Company		Rec	jived.	N N	$\mathbb{N}$	$\mathbb{N}^{\mathbb{N}}$						<u>_</u>		, joine	2		00	5	2	5	$ \leq $	Com	bany			
	Date/Time:			Company		Rece	Wedt	N. N.								<u>D</u>	ite/Ti	ne:								Comp	bany			
	Date/Time:			Company		Rece	sived t	уу.								Ö	te/Ti	TIE:								Comp	bany			
Custody Seals Intact Custody Seal No ∆ Yes ∆ No						Cool	er Ter	npera	ture(s	) °C a	nd Ot	her R	emari	ŝ															3	
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💸 eurofins

Job Number: 890-569-1 SDG Number: TE012921032

List Source: Eurofins Carlsbad

# Login Sample Receipt Checklist

Client: WSP USA Inc.

# Login Number: 569 List Number: 1

Creator: Clifton, Cloe

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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").
## Login Sample Receipt Checklist

Client: WSP USA Inc.

Login Number: 569 List Number: 2 Creator: Copeland, Tatiana

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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Job Number: 890-569-1 SDG Number: TE012921032

List Source: Eurofins Midland

List Creation: 04/26/21 09:09 AM

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:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	27792
	Action Type:
	[C-141] Release Corrective Action (C-141)

## CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2105537640 NASH DRAW #8 SWD, thank you. This closure is approved.	8/18/2021

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