District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2134437552
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

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)	Volume Recovered (bbls)
	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		

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2134437552
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

- ☐ The source of the release has been stopped.
- ☐ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: Adrian Bates Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Ramona Marcus Date: 12/13/2021

NAPP2134437552

Location:	**Nash Deep East Tank Battery**	
Spill Date:	**12/3/2021**	
Area 1		
Approximate Area =	196.51	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	35.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**35.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**35.00**	**bbls**

Incident ID	NAPP2134437552
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2134437552
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 03/03/2022

email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2134437552
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the 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 OCD District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health of 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: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 03/03/2022

Email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

ODC Only

Received by: Date:

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

Closure Approved by: Jennifer Nobui Date: 03/09/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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

March 3, 2022

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

Re: Closure Request
Nash Deep East
Incident Number NAPP2134437552
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 Deep East (Site) located in Unit P, Section 18, Township 23 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 following the release of produced water within a 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 NAPP2134437552.

RELEASE BACKGROUND

On December 3, 2021, internal corrosion of a 6-inch Victaulic connection resulted in the release of approximately 35 barrels (bbls) of produced water into a lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; all 35 bbls of the released produced water were recovered from within the lined containment. A 48-hour advance notice of the liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. The liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO submitted a Release Notification Form C-141 (Form C-141) on December 10, 2021. The release was assigned Incident Number NAPP2134437552.

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 between 50-100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well

321742103552601, located approximately 0.69 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 66 feet bgs and a total depth of 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1 and referenced well records are provided in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is a dry wash, located approximately 332 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high 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): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 29, 2021, WSP personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel advanced one borehole (BH01) via hand-auger at the location of the tear in the liner identified during the liner integrity inspection. Three soil samples (BH01, BH01A, and BH01B) were collected from borehole BH01 at depths of approximately 0.5 feet, 1-foot, and 3.5 feet bgs. Soil from the delineation samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log which is included as Attachment 2. The borehole was backfilled with the soil removed and XTO repaired the tear in the liner. The borehole delineation soil sample location is depicted on Figure 2. Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to

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

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples BH01, BH01A, and BH01B collected at depths of 0.5 feet, 1-foot, and 3.5 feet bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 4.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, WSP personnel advanced one borehole (BH01) at the location of the tear in the liner to assess for the presence or absence of soil impacts resulting from the December 3, 2021 produced water release within lined containment. Three delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet, 1-foot, and 3.5 feet bgs. Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil from the borehole indicated no elevated volatile aromatic hydrocarbons or chloride concentrations beneath the tear in the liner. 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, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria directly below the tear in the liner, XTO respectfully requests NFA for Incident Number NAPP2134437552.

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

Sincerely,

WSP USA Inc.

Hadlie Green
Assistant Consultant, Geologist

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

cc: Shelby Pennington, XTO
Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES

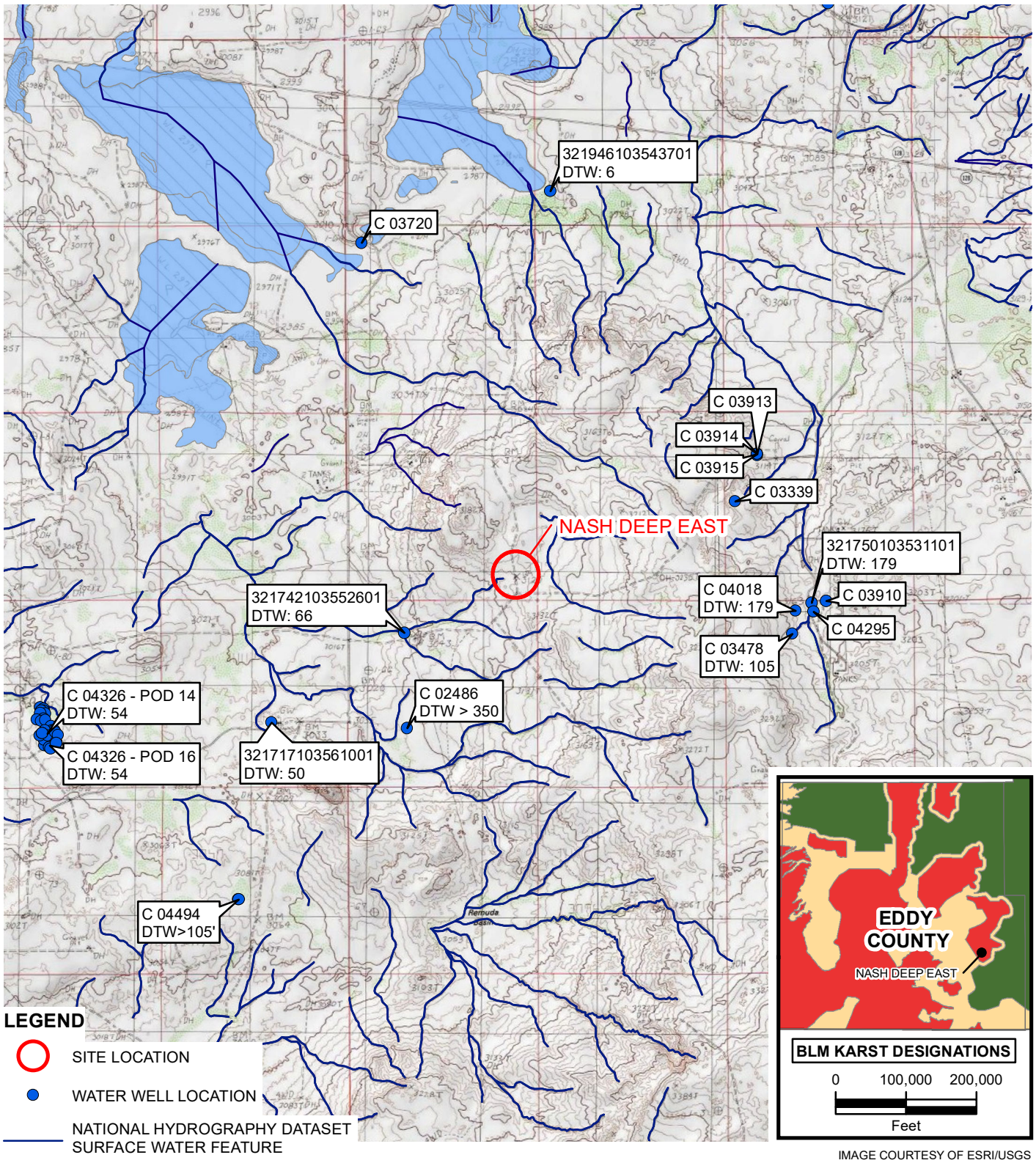


FIGURE 1
SITE LOCATION MAP
NASH DEEP EAST
UNIT P SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\31403236.020.0129.16_NASH DEEP EAST\MXD\31403236.020.0129.16_FIG01_SL_RECEPTOR_2021.mxd

IMAGE COURTESY OF ESRI

LEGEND

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

CONTAINMENT

0 100 200

Feet

N

NOTE: INCIDENT NUMBER nAPP2134437552
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
NASH DEEP EAST
UNIT P SEC 18 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\31403236.020.0129.16_NASH DEEP EAST\MXD\31403236.020.0129.16_FIG02_DELINEATION_2022.mxd

TABLES

Table 1

Soil Analytical Results
Nash Deep East
Incident Number NAPP2134437552
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
BH01	12/29/2021	0.5	<0.00200	0.0337	<49.9	<49.9	<49.9	<49.9	<49.9	228
BH01A	12/29/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	69.5
BH01B	12/29/2021	3.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	201

Notes:

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established

ATTACHMENT 1: REFERENCED WELL RECORDS

National Water Information System: Web Interface

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

Click to hideNews Bulletins

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

USGS 321742103552601 23S.30E.19.123421

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°17'42", Longitude 103°55'26" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 100 feet
Land surface altitude: 3,034 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-06	1993-05-06	8
Field/Lab water-quality samples	1972-09-20	1972-09-20	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

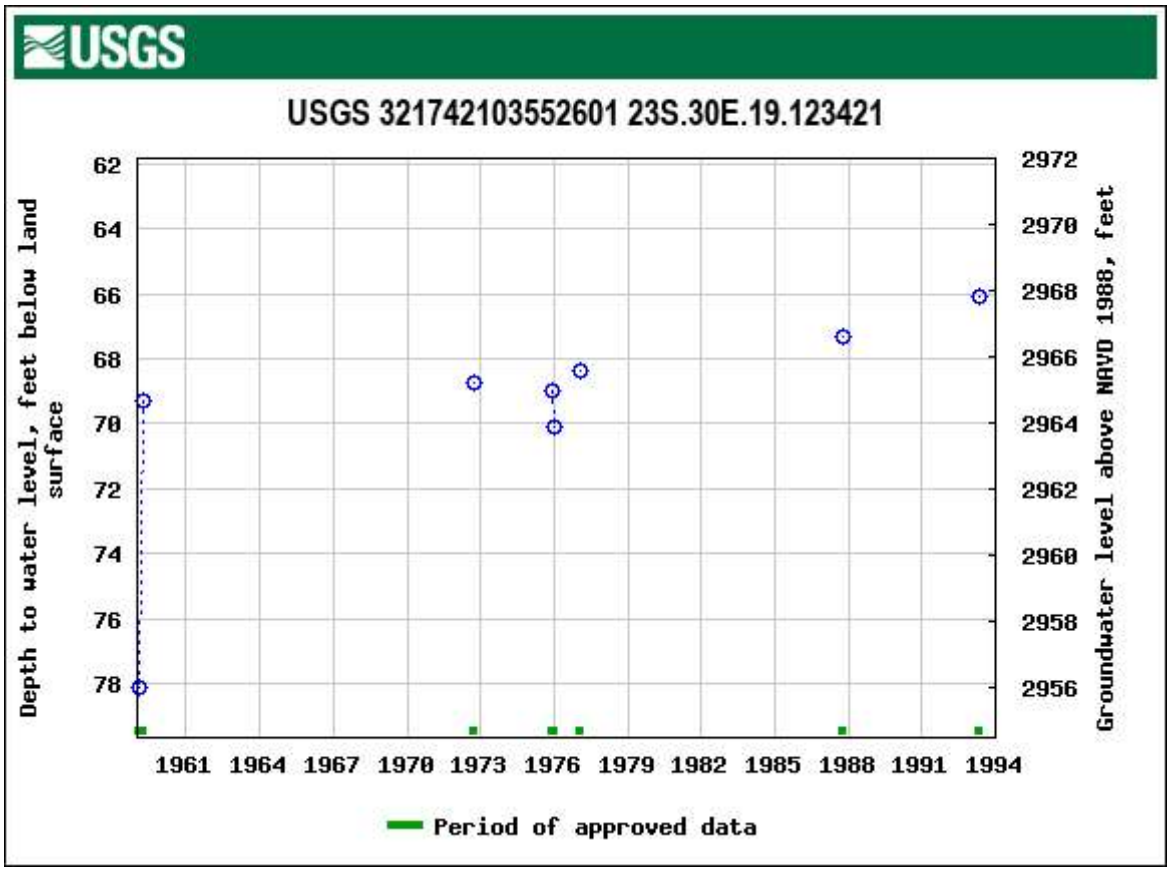
---

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms

Subscribe for system changes
News

Title: NWIS Site Information for USA: Site Inventory
URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321742103552601

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2021-12-16 16:08:41 EST
0.32 0.31 vaww01


USGS
USGS 321742103552601 23S.30E.19.123421
Depth to water level, feet below land surface
62
64
66
68
70
72
74
76
78
Groundwater level above NAVD 1988, feet
2972
2970
2968
2966
2964
2962
2960
2958
2956
1961 1964 1967 1970 1973 1976 1979 1982 1985 1988 1991 1994
Period of approved data

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	C 02486	3	2	3	19	23S	30E	601304	3572832*

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

Driller License: 1184 **Driller Company:** WEST TEXAS WATER WELL SERVICE

Driller Name: COLLIS, ROBERT E. (LD)

Drill Start Date: 01/26/1996 **Drill Finish Date:** 01/29/1996 **Plug Date:**

Log File Date: 03/13/1996 **PCW Rcv Date:** **Source:**

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

Casing Size: **Depth Well:** 350 feet **Depth Water:**

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

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 12/29/2021
Site Name: Nash Deep East	
RP or Incident Number: NAPP2134437552	
WSP Job Number: 31403236.020.0129	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS / Method: Hand Auger
Lat/Long: 32.29980, -103.91394 / Field Screening: Chloride, PID	Hole Diameter: 3" / Total Depth: 3.5'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<179.2	10.2	N	BH01	0.5	0.5	SC	DARK BROWN SAND
D	<179.2	0.5	N	BH01A	1	1	SC	BROWN SAND
D			N		1.5	1.5	SC	
D	297	0.3	N		2	2	SC	SAA
D			N		2.5	2.5	SC	
D	<179.2	0.5	N		3	3	SC	SAA
D	<179.2	1.0	N	BH01B	3.5	3.5	SC	SAND AND CALICHE

TD @ 3.5 ft bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Nash Deep East Eddy County, New Mexico	NAPP2134437552

Photo No.	Date
1	December 9, 2021

View facing west showing liner deficiency.

Photo No.	Date
2	December 29, 2021

View of location of BH01 in lined containment.

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1780-1
Laboratory Sample Delivery Group: #31403236.020.0129
Client Project/Site: NASH DEEP EAST BATTERY
Revision: 1

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
1/11/2022 9:01:31 AM

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

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

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

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Laboratory Job ID: 890-1780-1
SDG: #31403236.020.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Job ID: 890-1780-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1780-1

REVISION

The report being provided is a revision of the original report sent on 1/5/2022. The report (revision 1) is being revised due to Per client email, revise sampel ID from BH01 to BH01A.

Report revision history

Receipt
The samples were received on 12/29/2021 3:08 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA
Method 8021B: 4-Bromofluorobenzene recovery for the following sample was outside control limits: BH01 (890-1780-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH01A (890-1780-2). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Client Sample ID: BH01
Date Collected: 12/29/21 10:30
Date Received: 12/29/21 15:08
Sample Depth: 0.5

Lab Sample ID: 890-1780-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/03/22 10:15	01/03/22 19:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/03/22 10:15	01/03/22 19:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/03/22 10:15	01/03/22 19:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/03/22 10:15	01/03/22 19:23	1
o-Xylene	**0.0337**		0.00200		mg/Kg		01/03/22 10:15	01/03/22 19:23	1
Xylenes, Total	**0.0337**		0.00400		mg/Kg		01/03/22 10:15	01/03/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/03/22 10:15*	*01/03/22 19:23*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/03/22 10:15*	*01/03/22 19:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0337**		0.00400		mg/Kg			01/05/22 13:44	1

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

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

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	49.9		mg/Kg		01/03/22 10:55	01/03/22 21:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		01/03/22 10:55	01/03/22 21:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/03/22 10:55	01/03/22 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*01/03/22 10:55*	*01/03/22 21:27*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*01/03/22 10:55*	*01/03/22 21:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**228**		5.04		mg/Kg			01/04/22 09:57	1

Client Sample ID: BH01A
Date Collected: 12/29/21 10:45
Date Received: 12/29/21 15:08
Sample Depth: 1.0

Lab Sample ID: 890-1780-2
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		01/03/22 10:15	01/03/22 19:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/03/22 10:15	01/03/22 19:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/03/22 10:15	01/03/22 19:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/03/22 10:15	01/03/22 19:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/03/22 10:15	01/03/22 19:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/03/22 10:15	01/03/22 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/03/22 10:15*	*01/03/22 19:44*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Client Sample ID: BH01A

Date Collected: 12/29/21 10:45
Date Received: 12/29/21 15:08
Sample Depth: 1.0

Lab Sample ID: 890-1780-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/03/22 10:15*	*01/03/22 19:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/05/22 13:44	1

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

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

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 22:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 22:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*01/03/22 10:55*	*01/03/22 22:30*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*01/03/22 10:55*	*01/03/22 22:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.5**		4.97		mg/Kg			01/04/22 10:21	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-9761-A-1-F MS	Matrix Spike	105	103
880-9761-A-1-G MSD	Matrix Spike Duplicate	115	112
890-1780-1	BH01	107	95
890-1780-2	BH01A	109	95
LCS 880-15880/1-A	Lab Control Sample	110	104
LCSD 880-15880/2-A	Lab Control Sample Dup	104	99
MB 880-15880/5-A	Method Blank	118	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1780-1	BH01	132 S1+	133 S1+
890-1780-1 MS	BH01	118	113
890-1780-1 MSD	BH01	119	117
890-1780-2	BH01A	144 S1+	149 S1+
LCS 880-15882/2-A	Lab Control Sample	101	84
LCSD 880-15882/3-A	Lab Control Sample Dup	105	87
MB 880-15882/1-A	Method Blank	112	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15880/5-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: LCS 880-15880/1-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: LCSD 880-15880/2-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: 880-9761-A-1-F MS
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15880

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

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

Lab Sample ID: 880-9761-A-1-F MS
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: 880-9761-A-1-G MSD
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 15880

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

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

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

Lab Sample ID: MB 880-15882/1-A
Matrix: Solid
Analysis Batch: 15874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15882

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 20:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 20:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/03/22 10:55	01/03/22 20:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/03/22 10:55*	*01/03/22 20:25*	*1*
o-Terphenyl	*126*		*70 - 130*	*01/03/22 10:55*	*01/03/22 20:25*	*1*

Lab Sample ID: LCS 880-15882/2-A
Matrix: Solid
Analysis Batch: 15874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15882

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

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

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

Lab Sample ID: LCS 880-15882/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15874 **Prep Batch: 15882**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-15882/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15874 **Prep Batch: 15882**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-1780-1 MS **Client Sample ID: BH01**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15874 **Prep Batch: 15882**

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

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-1780-1 MSD **Client Sample ID: BH01**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15874 **Prep Batch: 15882**

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	117		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15878/1-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Method Blank
Prep Type: Soluble

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

Lab Sample ID: LCS 880-15878/2-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-15878/3-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	246.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-1779-A-1-B MS
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1110		250	1297	4	mg/Kg		74	90 - 110		

Lab Sample ID: 890-1779-A-1-C MSD
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1110		250	1287	4	mg/Kg		70	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

GC VOA

Analysis Batch: 15550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	8021B	15880
890-1780-2	BH01A	Total/NA	Solid	8021B	15880
MB 880-15880/5-A	Method Blank	Total/NA	Solid	8021B	15880
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	8021B	15880
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15880
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	15880
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15880

Prep Batch: 15880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	5035	
890-1780-2	BH01A	Total/NA	Solid	5035	
MB 880-15880/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 16096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	Total BTEX	
890-1780-2	BH01A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 15874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	8015B NM	15882
890-1780-2	BH01A	Total/NA	Solid	8015B NM	15882
MB 880-15882/1-A	Method Blank	Total/NA	Solid	8015B NM	15882
LCS 880-15882/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15882
LCSD 880-15882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15882
890-1780-1 MS	BH01	Total/NA	Solid	8015B NM	15882
890-1780-1 MSD	BH01	Total/NA	Solid	8015B NM	15882

Prep Batch: 15882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	8015NM Prep	
890-1780-2	BH01A	Total/NA	Solid	8015NM Prep	
MB 880-15882/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15882/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1780-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-1780-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Total/NA	Solid	8015 NM	
890-1780-2	BH01A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

HPLC/IC

Leach Batch: 15878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Soluble	Solid	DI Leach	
890-1780-2	BH01A	Soluble	Solid	DI Leach	
MB 880-15878/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1779-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1779-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 15923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1780-1	BH01	Soluble	Solid	300.0	15878
890-1780-2	BH01A	Soluble	Solid	300.0	15878
MB 880-15878/1-A	Method Blank	Soluble	Solid	300.0	15878
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	300.0	15878
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15878
890-1779-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	15878
890-1779-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15878

Lab Chronicle

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Client Sample ID: BH01
Date Collected: 12/29/21 10:30
Date Received: 12/29/21 15:08

Lab Sample ID: 890-1780-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	15550	01/03/22 19:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15874	01/03/22 21:27	AJ	XEN MID
Soluble	Leach	DI Leach			15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		1	15923	01/04/22 09:57	CH	XEN MID

Client Sample ID: BH01A
Date Collected: 12/29/21 10:45
Date Received: 12/29/21 15:08

Lab Sample ID: 890-1780-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	15550	01/03/22 19:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15882	01/03/22 10:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15874	01/03/22 22:30	AJ	XEN MID
Soluble	Leach	DI Leach			15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		1	15923	01/04/22 10:21	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY
SDG: #31403236.020.0129

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-1780-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1780-1
SDG: #31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1780-1	BH01	Solid	12/29/21 10:30	12/29/21 15:08	0.5
890-1780-2	BH01A	Solid	12/29/21 10:45	12/29/21 15:08	1.0

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	KYLE LITTRELL
Company Name:	WSP USA Inc.	Company Name:	XTO ENERGY
Address:	3300 North A Street	Address:	3104 EAST GREEN STREET
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.286.3849	Email:	tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	NASH DEEP EAST BATTERY	Turn Around	Pres. Code
Project Number:	#314032360.020.029	☑ Routine ☐ Rush	
Project Location:	CC: 105 6641001	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	T-NM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.6
Total Containers:		Corrected Temperature:	4.4

ANALYSIS REQUEST

Parameters: BTEX, TPH, Chloride

890-1780 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX	TPH	Chloride	Sample Comments
BH07	S	12/29	1030	0.5'	G	1	x	x	x	API:
BH02	S	12/29	1045	1.0'	G	1	x	x	x	30-015-29783

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/29/21 1508	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1780-1
SDG Number: #31403236.020.0129

Login Number: 1780
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1780-1
SDG Number: #31403236.020.0129

Login Number: 1780
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 01/03/22 08:31 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1781-1
Laboratory Sample Delivery Group: #31403236.020.0129
Client Project/Site: NASH DEEP EAST BATTERY
Revision: 1

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

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
1/11/2022 9:03:19 AM

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

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

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

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Laboratory Job ID: 890-1781-1
SDG: #31403236.020.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Job ID: 890-1781-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1781-1

REVISION

The report being provided is a revision of the original report sent on 1/5/2022. The report (revision 1) is being revised due to Per client email, revised sample ID from BH01 to BH01B.

Report revision history

Receipt
The sample was received on 12/29/2021 3:09 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA
Method 8021B: 4-Bromofluorobenzene recovery for the following sample was outside control limits: BH01B (890-1781-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

Client Sample ID: BH01B

Date Collected: 12/29/21 12:45
Date Received: 12/29/21 15:09
Sample Depth: 3.5

Lab Sample ID: 890-1781-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/03/22 10:15	01/03/22 21:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/03/22 10:15	01/03/22 21:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/03/22 10:15	01/03/22 21:34	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		01/03/22 10:15	01/03/22 21:34	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/03/22 10:15	01/03/22 21:34	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/03/22 10:15	01/03/22 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/03/22 10:15*	*01/03/22 21:34*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*01/03/22 10:15*	*01/03/22 21:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/05/22 13:44	1

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

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

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 19:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 19:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*171*	*S1+*	*70 - 130*	*01/03/22 09:26*	*01/03/22 19:44*	*1*
o-Terphenyl	*166*	*S1+*	*70 - 130*	*01/03/22 09:26*	*01/03/22 19:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**201**		24.8		mg/Kg			01/04/22 10:29	5

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9761-A-1-F MS	Matrix Spike	105	103
880-9761-A-1-G MSD	Matrix Spike Duplicate	115	112
890-1781-1	BH01B	116	92
LCS 880-15880/1-A	Lab Control Sample	110	104
LCSD 880-15880/2-A	Lab Control Sample Dup	104	99
MB 880-15880/5-A	Method Blank	118	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1776-A-1-F MS	Matrix Spike	123	101
890-1776-A-1-G MSD	Matrix Spike Duplicate	122	114
890-1781-1	BH01B	171 S1+	166 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-15867/2-A	Lab Control Sample	106	101
LCSD 880-15867/3-A	Lab Control Sample Dup	116	103
MB 880-15867/1-A	Method Blank	112	115

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15880/5-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: LCS 880-15880/1-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: LCSD 880-15880/2-A
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15880

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

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

Lab Sample ID: 880-9761-A-1-F MS
Matrix: Solid
Analysis Batch: 15550

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15880

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

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

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

Lab Sample ID: 880-9761-A-1-F MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15550 **Prep Batch: 15880**

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

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

Lab Sample ID: 880-9761-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15550 **Prep Batch: 15880**

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

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

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

Lab Sample ID: MB 880-15867/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 10:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 10:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/03/22 09:26	01/03/22 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/03/22 09:26*	*01/03/22 10:58*	*1*
o-Terphenyl	*115*		*70 - 130*	*01/03/22 09:26*	*01/03/22 10:58*	*1*

Lab Sample ID: LCS 880-15867/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1094		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1030		mg/Kg		103	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

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

Lab Sample ID: LCS 880-15867/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-15867/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1023		mg/Kg		102	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1036		mg/Kg		104	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-1776-A-1-F MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	988.5		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	80.5		996	1038		mg/Kg		96	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-1776-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 15869 **Prep Batch: 15867**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	989.9		mg/Kg		96	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	80.5		999	1040		mg/Kg		96	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	114		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15878/1-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Method Blank
Prep Type: Soluble

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

Lab Sample ID: LCS 880-15878/2-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-15878/3-A
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	246.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-1779-A-1-B MS
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1110		250	1297	4	mg/Kg		74	90 - 110		

Lab Sample ID: 890-1779-A-1-C MSD
Matrix: Solid
Analysis Batch: 15923

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1110		250	1287	4	mg/Kg		70	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

GC VOA

Analysis Batch: 15550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	8021B	15880
MB 880-15880/5-A	Method Blank	Total/NA	Solid	8021B	15880
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	8021B	15880
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15880
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	15880
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15880

Prep Batch: 15880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	5035	
MB 880-15880/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15880/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15880/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9761-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-9761-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 16096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	8015NM Prep	
MB 880-15867/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15867/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1776-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1776-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	8015B NM	15867
MB 880-15867/1-A	Method Blank	Total/NA	Solid	8015B NM	15867
LCS 880-15867/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15867
LCSD 880-15867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15867
890-1776-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	15867
890-1776-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15867

Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Soluble	Solid	DI Leach	
MB 880-15878/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

HPLC/IC (Continued)

Leach Batch: 15878 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1779-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1779-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 15923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1781-1	BH01B	Soluble	Solid	300.0	15878
MB 880-15878/1-A	Method Blank	Soluble	Solid	300.0	15878
LCS 880-15878/2-A	Lab Control Sample	Soluble	Solid	300.0	15878
LCSD 880-15878/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15878
890-1779-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	15878
890-1779-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15878

Lab Chronicle

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

Client Sample ID: BH01B

Date Collected: 12/29/21 12:45
Date Received: 12/29/21 15:09

Lab Sample ID: 890-1781-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15880	01/03/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	15550	01/03/22 21:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16096	01/05/22 13:44	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16097	01/05/22 14:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15867	01/03/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15869	01/03/22 19:44	AJ	XEN MID
Soluble	Leach	DI Leach			15878	01/03/22 10:05	CH	XEN MID
Soluble	Analysis	300.0		5	15923	01/04/22 10:29	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1781-1
Project/Site: NASH DEEP EAST BATTERY SDG: #31403236.020.0129

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: NASH DEEP EAST BATTERY

Job ID: 890-1781-1
SDG: #31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1781-1	BH01B	Solid	12/29/21 12:45	12/29/21 15:09	3.5

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	KYLE Littrell
Company Name:	WSP USA Inc	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 EAST GREEN STREET
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	NASH DEEP EAST BATTERY	Turn Around	☑ Routine ☐ Rush
Project Number:	# 314032 36.020.0129	Due Date:	
Project Location:	C: 105 664 1001	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	T-NM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.6
Total Containers:		Corrected Temperature:	4.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	TPH	Chloride
BH01	S	12/29	1245	3.5'	G	1		x	x	x

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

API: 30-015-29783

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/29/21 3:09	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1781-1
SDG Number: #31403236.020.0129

Login Number: 1781
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1781-1
SDG Number: #31403236.020.0129

Login Number: 1781
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 01/03/22 08:30 AM

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

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

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

CONDITIONS

Action 76904

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 76904
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Going forward, please submit with Closure Report photos of intact liner.	3/9/2022