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	NAPP2100428768
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@xtoenergy.com	Incident # *(assigned by OCD)*
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.09300 Longitude -103.99900
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Thriller	Site Type Battery
Date Release Discovered 12/21/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
A	32	25S	29E	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) .12	Volume Recovered (bbls) 0
☐ 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	LO was at the Thriller battery when the high pressure flare released a small amount of fluid which ignited and extinguished itself after impacting ground. A regulator on air supply had failed, causing the heater treater to overfill into the flare line. A third-party contractor has been retained for remediation activities.	

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2100428768
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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? A release that results in a fire or is the result of a fire.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Adrian Baker to 'Bratcher, Mike, EMNRD'; 'Venegas, Victoria, EMNRD'; 'Hamlet, Robert, EMNRD'; 'emily.hernandez@state.nm.us'; 'Mann, Ryan' on Tuesday, December 22, 2020 3:46 PM 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

☒ 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:
NA

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: Kyle Littrell
Title: SH&E Supervisor
Signature:
Date: 01-04-21
email: Kyle_Littrell@xtoenergy.com
Telephone: 432-221-7331

OCD Only

Received by:
Date:

Incident ID	NAPP2100428768
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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2100428768
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: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 4/1/2021

email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2100428768
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 4/1/2021

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Chad Hensley Date: 06/11/2021

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: Chad Hensley Date: 06/11/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

April 5, 2021

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

RE: Closure Request
Thriller Battery
Incident Number NAPP2100428768
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), is pleased to present the following Closure Request detailing site assessment and soil sampling activities at the Thriller Battery (Site) in Unit A, Section 32, Township 25 South, Range 29 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 a small crude oil fire at the Site. Based on the site assessment activities and laboratory analytical results from the soil sampling events, XTO is submitting this Closure Request, and requesting no further action (NFA) for Incident Number NAPP2100428768.

RELEASE BACKGROUND

On December 21, 2020, a high-pressure flare released a small amount of fluid, which ignited and extinguished itself after reaching the ground. The release was due to a regulator on the air supply that failed and caused the heater-treater to overfill into the flare line. Approximately 0.12 barrels (bbls) of crude oil were released. XTO reported the release immediately via email to the New Mexico Oil Conservation Division (NMOCD), and submitted a Release Notification Form C-141 on January 4, 2021. The release was assigned Incident Number NAPP2100428768.

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 feet below ground surface (bgs) and 100 feet 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 320532104001701, located approximately 0.37 miles west of the Site. The groundwater well was most recently measured in November 1992 with a reported depth to groundwater of 98 feet bgs and a total depth of 128 feet bgs. Ground surface elevation at the groundwater well location is 2,988 feet above mean sea level (amsl), which is approximately 6 feet higher in elevation than

the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallow groundwater.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 2,065 feet east 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 (medium 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: 10,000 mg/kg

SITE ASSESSMENT ACTIVITIES

On January 28, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected one preliminary assessment soil sample, SS01, within the release extent from a depth of 0.5 feet bgs to assess for the presence or absence of impacted soil. The preliminary soil sample was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample location was mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

On March 18, 2021, WSP personnel returned to the Site to oversee additional site assessment activities. Potholes PH01 through PH03 were advanced to a depth of 4 feet bgs within and around the release extent to confirm the absence of impacted soil. Delineation soil samples were collected from each pothole from depths ranging from 2 feet bgs to 4 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and

Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling log, which are included in Attachment 2. The pothole soil sample locations are depicted on Figure 3. Photographic documentation 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 sample was transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil sample SS01 and delineation soil samples from potholes PH01 through PH03 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the December 21, 2020 crude oil fire. Laboratory analytical results for the soil samples collected within the release extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. As such, XTO respectfully requests no further action for Incident Number NAPP2100428768.

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

Sincerely,

WSP USA Inc.

Spencer Lo
Staff Geologist

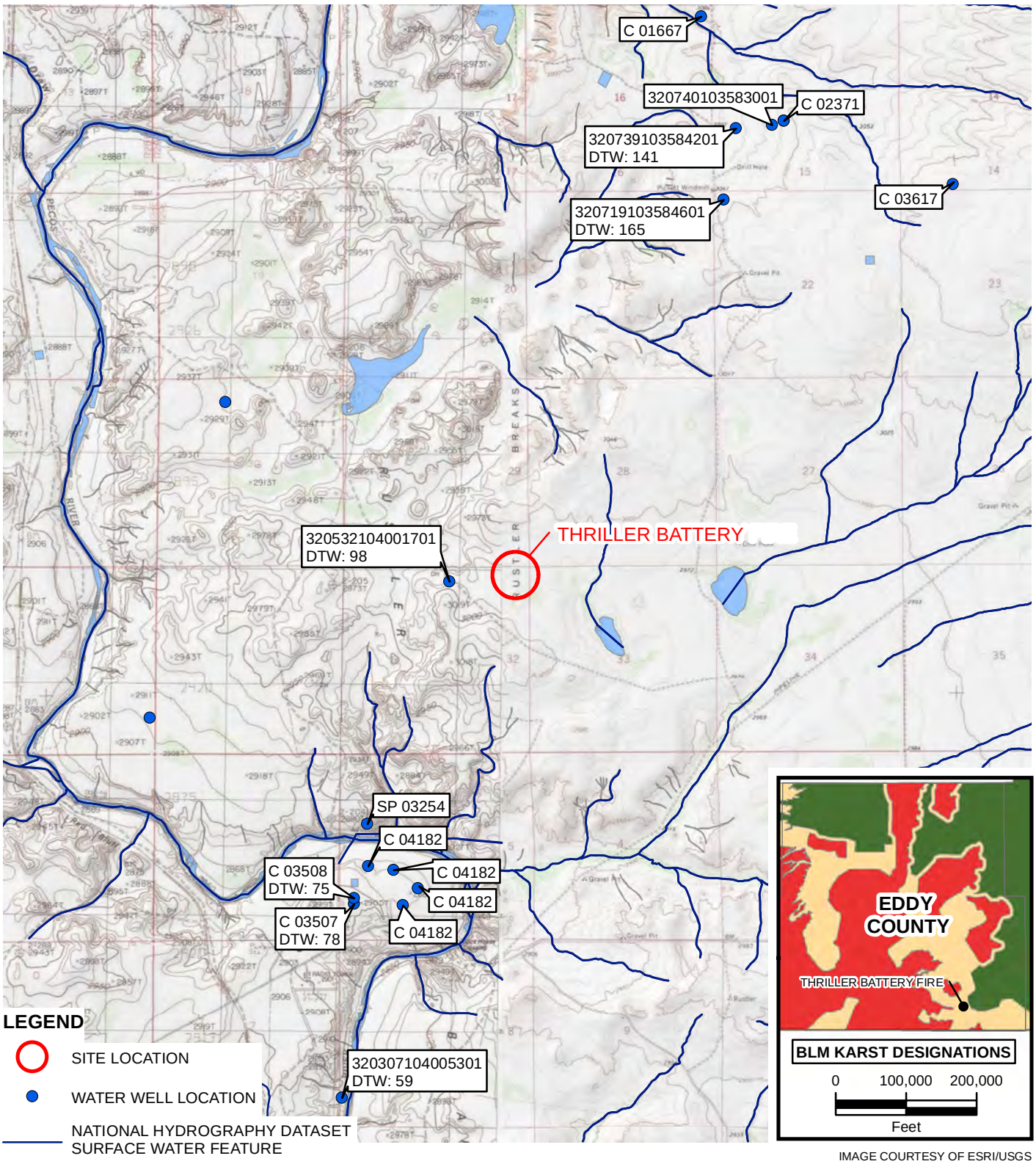
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Kyle Littrell, XTO
Ryan Mann, New Mexico State Land Office

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	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



LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NOT ASSIGNED

FIGURE 1
SITE LOCATION MAP
THRILLER BATTERY
UNIT A SEC 32 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\012921012_THRILLER BATTERY FIRE\012921012_FIG01_SL_RECEPTOR_2021.mxd

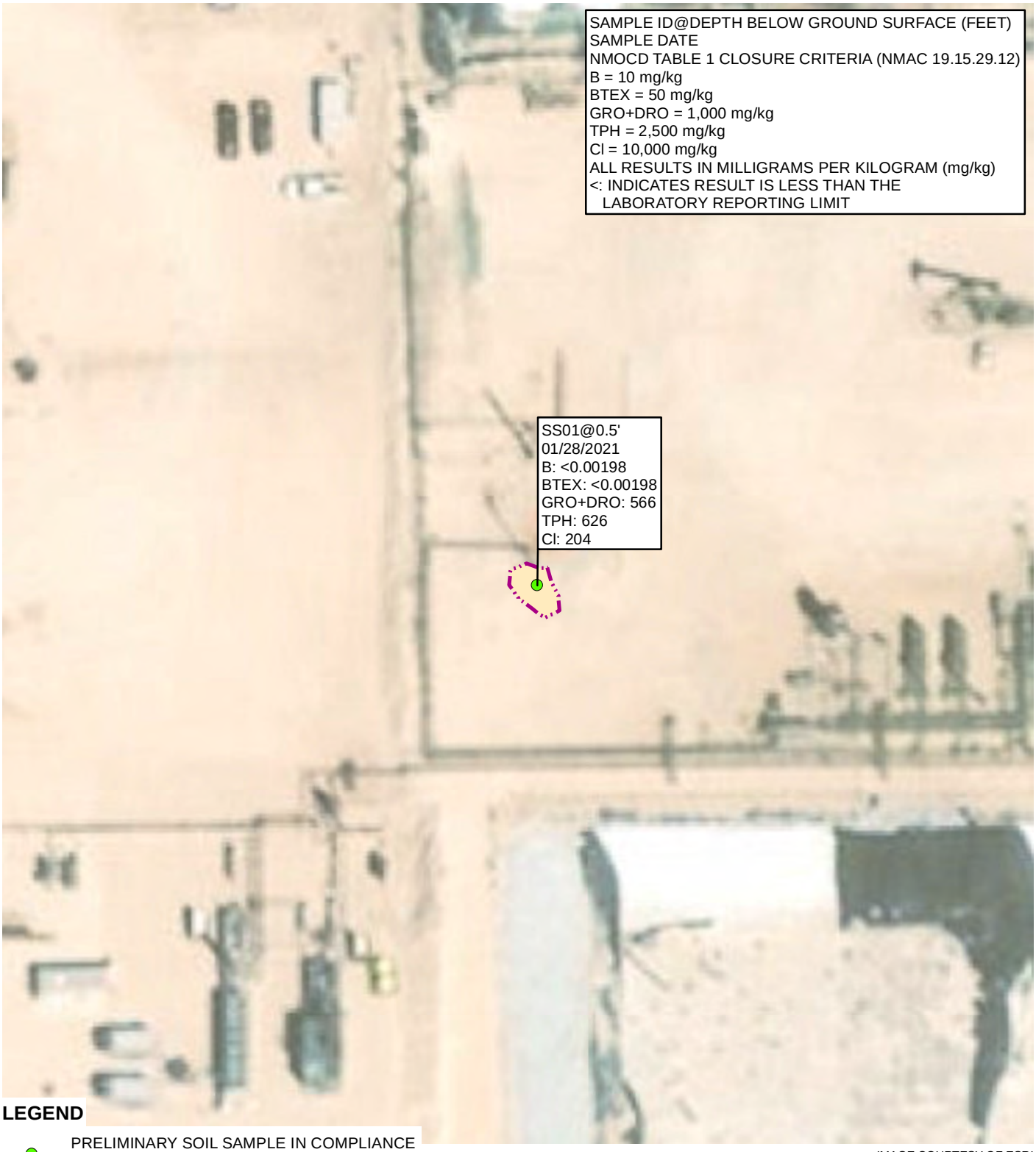


FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
THRILLER BATTERY
UNIT A SEC 32 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012921012_THRILLER BATTERY FIRE\012921012_FIG02_PRELIMINARY_2021_1.mxd

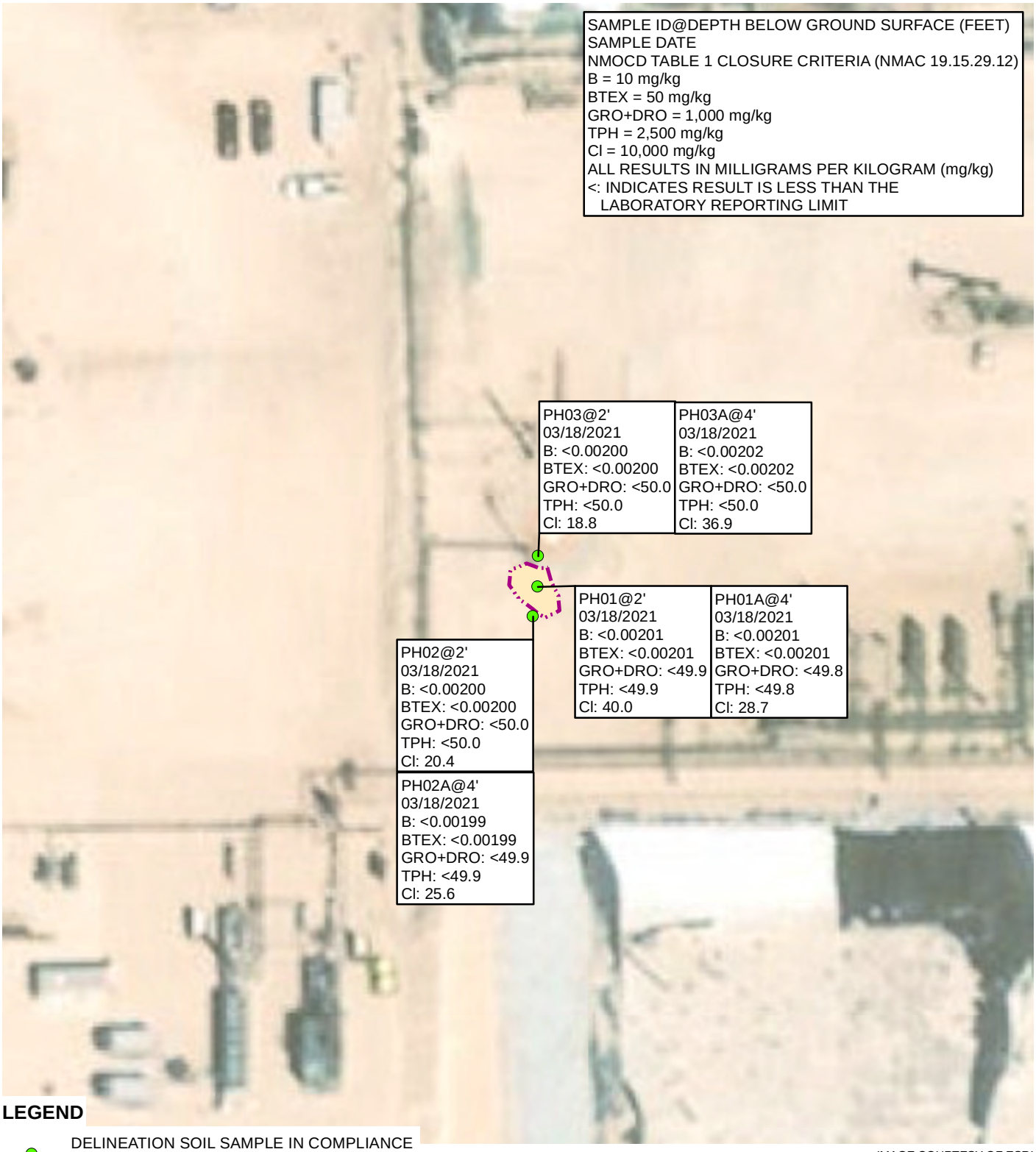


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
THRILLER BATTERY
UNIT A SEC 32 T25S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012921012_THRILLER BATTERY FIRE\012921012_FIG03_DELINEATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
Thriller Battery
Incident Number NAPP2100428768
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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	1,000	2,500	10,000
Surface Samples										
SS01	01/28/2021	0.5	<0.00198	<0.00198	<49.8	566	59.6	566	626	204
Delineation Samples										
PH01	03/18/2021	2	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	40.0
PH01A	03/18/2021	4	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	28.7
PH02	03/18/2021	2	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	20.4
PH02A	03/18/2021	4	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	25.6
PH03	03/18/2021	2	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	18.8
PH03A	03/18/2021	4	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	36.9

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

ATTACHMENT 1: REFERENCED WELL RECORD

USGS 320532104001701 25S.29E.32.21111

Available data for this site

Well Site

DESCRIPTION:

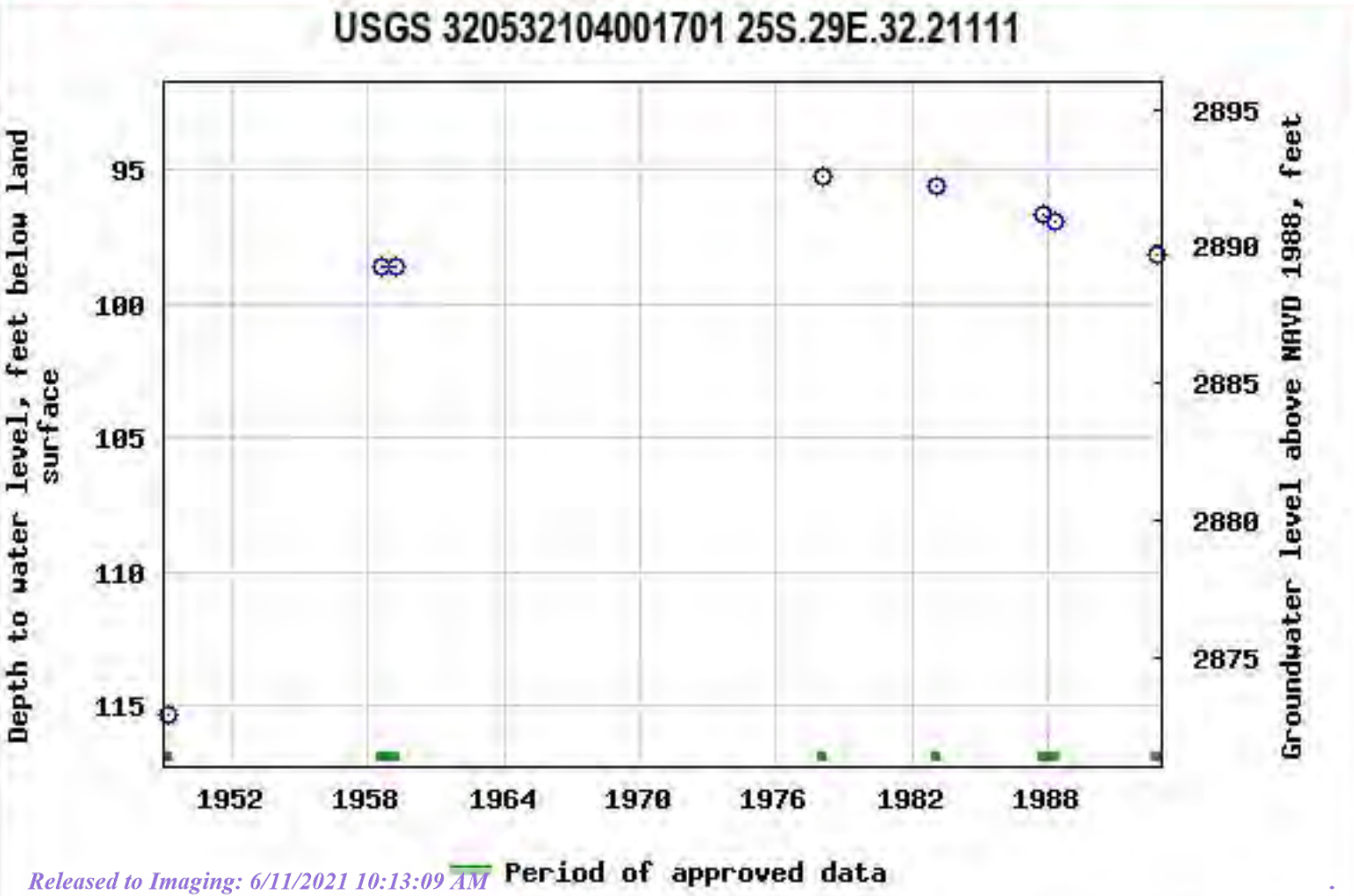
Latitude 32°05'32", Longitude 104°00'17" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 128 feet
Land surface altitude: 2,988 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1949-03-11	1992-11-03	24
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


USGS 320532104001701 25S.29E.32.21111
Depth to water level, feet below land surface
95
100
105
110
115
Groundwater level above NAVD 1988, feet
2895
2890
2885
2880
2875
1952
1958
1964
1970
1976
1982
1988
Period of approved data

USGS 320307104005301 26S.28E.13.11214

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°03'07", Longitude 104°00'53" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 2,858 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

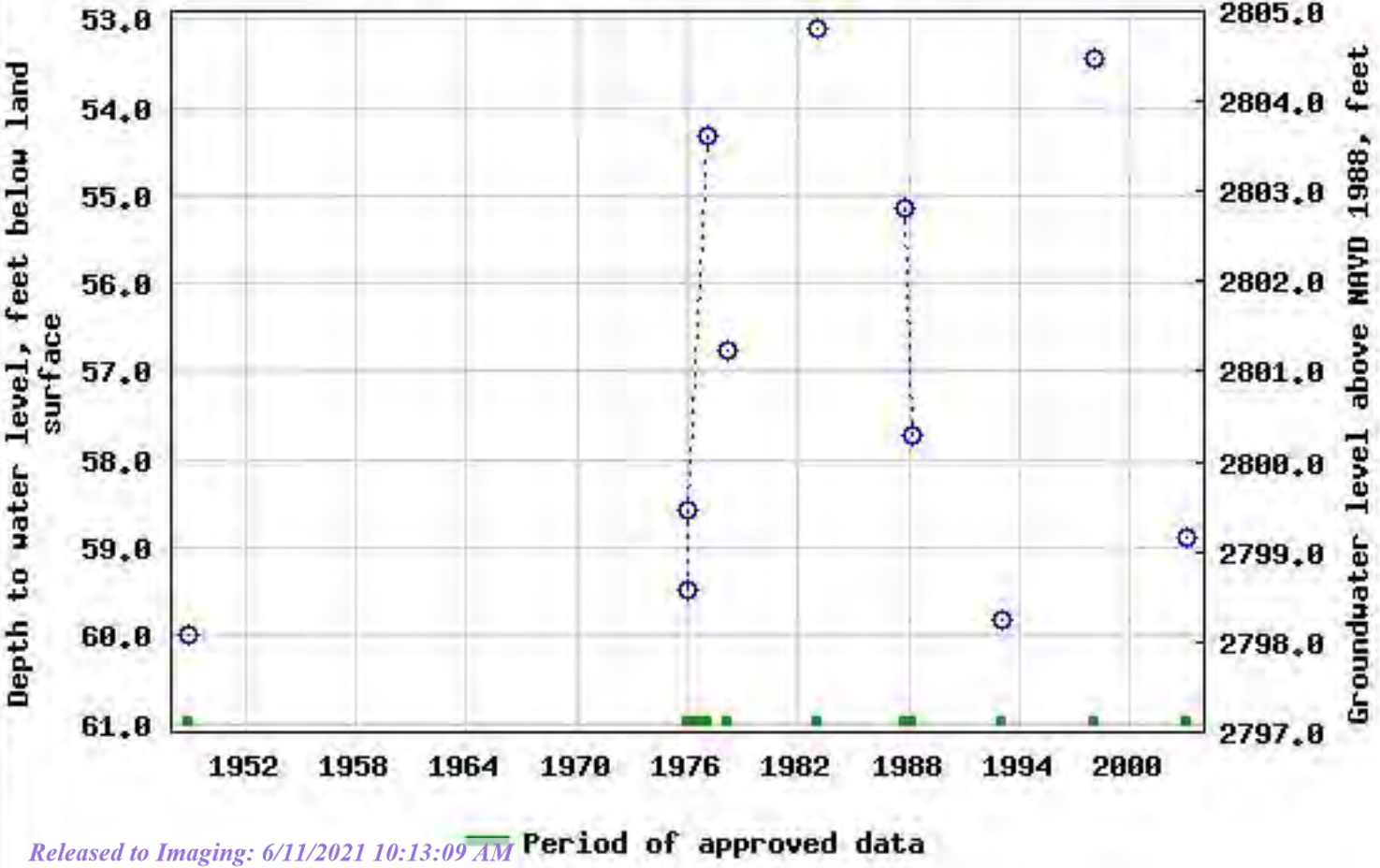
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1948-12-15	2003-01-27	33
Revisions	Unavailable (site:0) (timeseries:0)		

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

USGS

USGS 320307104005301 26S.28E.13.11214



USGS 320719103584601 25S.29E.16.44444

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°07'19", Longitude 103°58'46" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 200 feet
Land surface altitude: 3,042 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

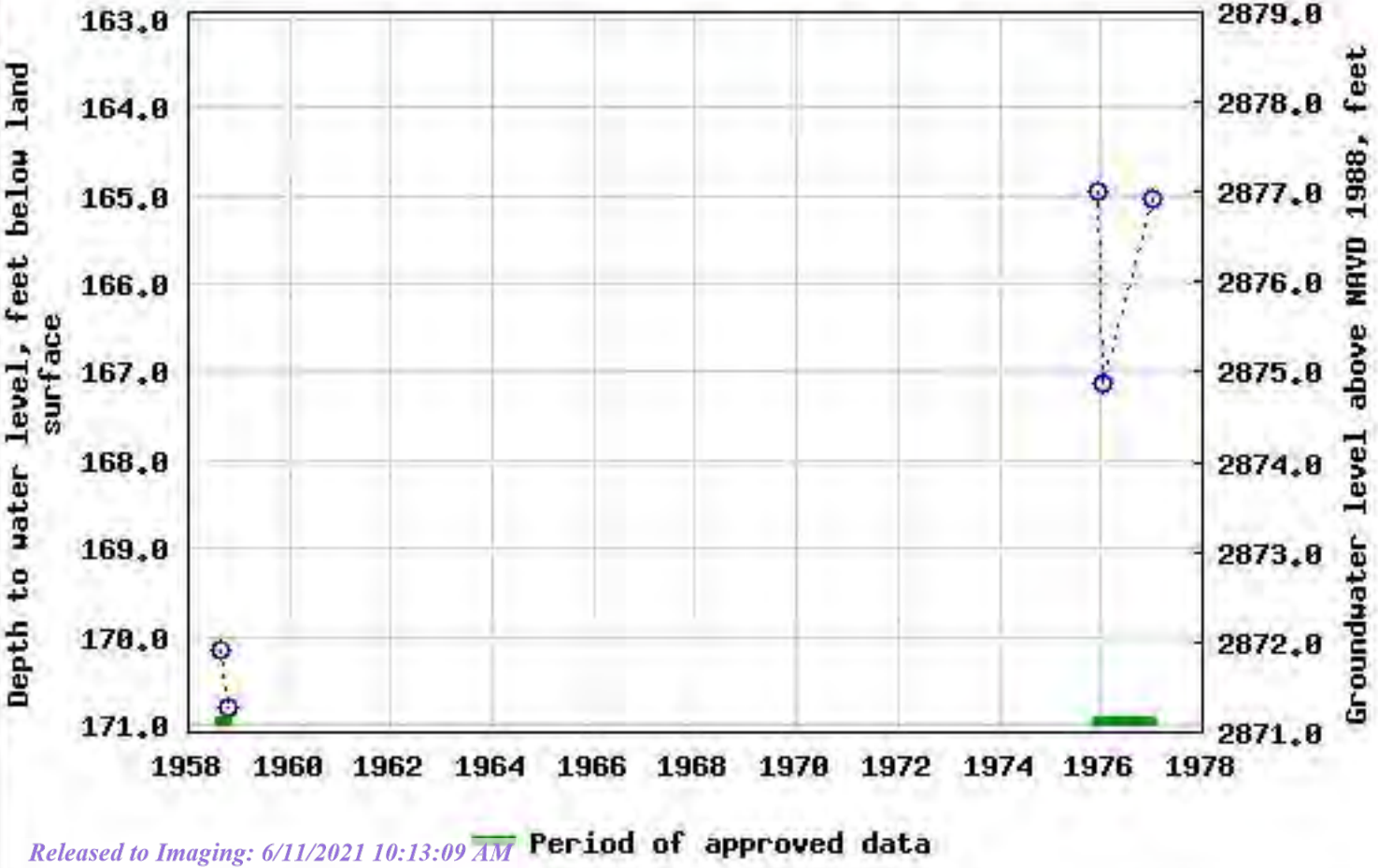
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-19	1977-01-14	15
Revisions	Unavailable (site:0) (timeseries:0)		

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

USGS

USGS 320719103584601 25S.29E.16.44444



USGS 320739103584201 25S.29E.15.31134

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°07'39", Longitude 103°58'42" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 192 feet
Land surface altitude: 3,017 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

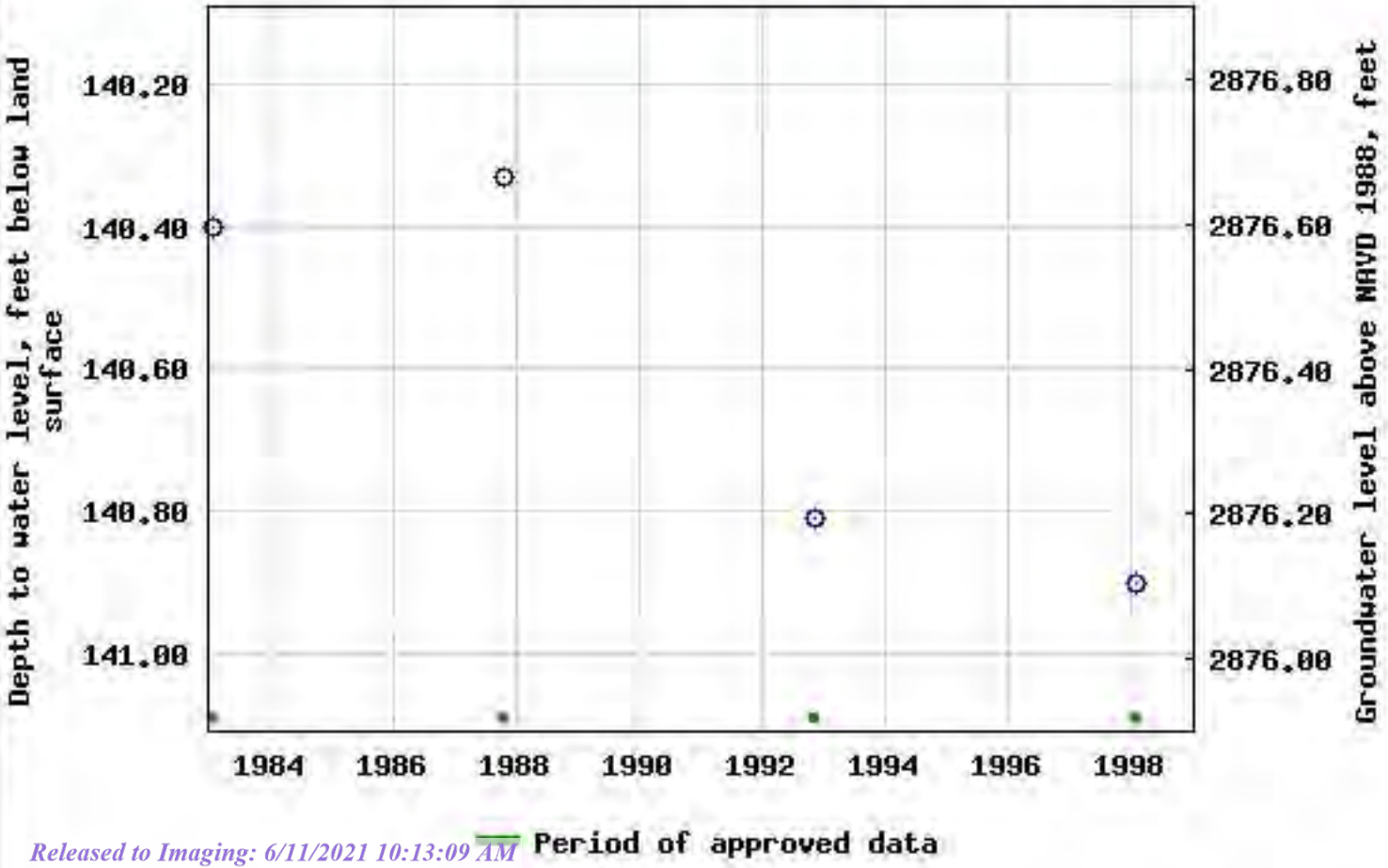
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1983-02-01	1998-01-29	12
Revisions	Unavailable (site:0) (timeseries:0)		

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

USGS

USGS 320739103584201 25S.29E.15.31134



New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	C 03507 POD1	1	3	3	05	26S	29E	593064	3548313

x

Driller License: 1058 **Driller Company:** KEY'S DRILLING & PUMP SERVICE

Driller Name: KEY, CLINTON

Drill Start Date: 08/26/2011 **Drill Finish Date:** 08/26/2011 **Plug Date:**

Log File Date: 09/12/2011 **PCW Rcv Date:** **Source:** Shallow

Pump Type: SUBMER **Pipe Discharge Size:** **Estimated Yield:** 35 GPM

Casing Size: 6.00 **Depth Well:** 140 feet **Depth Water:** 78 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	78	79	Shale/Mudstone/Siltstone
	105	106	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	75	112

x

POINT OF DIVERSION SUMMARY

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	C 03508 POD1	1	3	3	05	26S	29E	593063	3548361

x

Driller License: 1058 **Driller Company:** KEY'S DRILLING & PUMP SERVICE

Driller Name: KEY, CLINTON

Drill Start Date: 08/24/2011 **Drill Finish Date:** 08/24/2011 **Plug Date:**

Log File Date: 09/12/2011 **PCW Rcv Date:** **Source:** Shallow

Pump Type: SUBMER **Pipe Discharge Size:** **Estimated Yield:** 40 GPM

Casing Size: 6.00 **Depth Well:** 140 feet **Depth Water:** 75 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	75	76	Shale/Mudstone/Siltstone

x

Casing Perforations:	Top	Bottom
	65	105

x

POINT OF DIVERSION SUMMARY

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH01	3/18/2021
Site Name: Thriller	
RP or Incident Number: NAPP2100428768	
LTE Job Number:	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By SL	Method: Backhoe

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.092375,-103.999386	Chloride, PID	-	4'

Comments:
Field screening value includes 60% error factor. TD @ 4'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-4' Sand w/ caliche gravel, well sorted, brown, no odor, no stain, trace silt
						1		
D	<186	0.0	N	PH01	2'	2	SP-SM	
						3		
D	<186	0.0	N	PH01A	4'	4		
						5		TD @ 4'
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: PH02	Date: 3/18/2021
	Site Name: Thriller	
	RP or Incident Number: NAPP2100428768	
	LTE Job Number:	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By SL	Method: Backhoe
Lat/Long: 32.902347,-103.999391	Field Screening: Chloride, PID	Hole Diameter: -	Total Depth: 4'

Comments:
Field screening value includes 60% error factor. TD @ 4'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-4' Sand w/ caliche gravel, well sorted, brown, no odor, no stain, trace silt
						1		
D	<186	0.0	N	PH02	2'	2	SP-SM	
						3		
D	<186	0.0	N	PH02A	4'	4		
						5		TD @ 4'
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH03	Date: 3/18/2021
Site Name: Thriller	
RP or Incident Number: NAPP2100428768	
LTE Job Number:	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By SL	Method: Backhoe		
Lat/Long: 32.092405,-103.999385	Field Screening: Chloride, PID	Hole Diameter: -	Total Depth: 4'

Comments:
Field screening value includes 60% error factor. TD @ 4'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-4' Sand w/ caliche gravel, well sorted, brown, no odor, no stain, trace silt
						1		
D	<186	0.0	N	PH03	2'	2	SP-SM	
						3		
D	<186	0.0	N	PH03A	4'	4		
						5		TD @ 4'
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Thriller Eddy County, NM	TE012921012

Photo No.	Date
1	January 28, 2021

Western view of flare and release area.

Photo No.	Date
2	March 18, 2021

Western view of pothole within release area.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

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Certificate of Analysis Summary 686416

WSP USA, Dallas, TX

Project Name: Thriller Battery Fire

Project Id: 1067741001
Contact: Dan Moir
Project Location: Eddy County, New Mexico

Date Received in Lab: Thu 01.28.2021 11:46
Report Date: 02.04.2021 09:28
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	686416-001					
	Field Id:	SS01					
	Depth:	0.5- ft					
	Matrix:	SOIL					
	Sampled:	01.28.2021 09:00					
BTEX by EPA 8021B	***Extracted:***	01.29.2021 10:33					
	Analyzed:	01.29.2021 15:17					
	Units/RL:	mg/kg	RL				
Benzene		<0.00198	0.00198				
Toluene		<0.00198	0.00198				
Ethylbenzene		<0.00198	0.00198				
m,p-Xylenes		<0.00397	0.00397				
o-Xylene		<0.00198	0.00198				
Total Xylenes		<0.00198	0.00198				
Total BTEX		<0.00198	0.00198				
Chloride by EPA 300	***Extracted:***	01.28.2021 16:36					
	Analyzed:	01.29.2021 06:17					
	Units/RL:	mg/kg	RL				
Chloride		204	100				
TPH by SW8015 Mod SUB: T104704400-20-21	***Extracted:***	02.02.2021 12:00					
	Analyzed:	02.02.2021 19:10					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8				
Diesel Range Organics (DRO)		566	49.8				
Motor Oil Range Hydrocarbons (MRO)		59.6	49.8				
Total GRO-DRO		566	49.8				
Total TPH		626	49.8				

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 686416

for

WSP USA

Project Manager: Dan Moir

Thriller Battery Fire

1067741001

02.04.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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02.04.2021

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **686416**
Thriller Battery Fire
Project Address: Eddy County, New Mexico

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 686416. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 686416 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 686416

WSP USA, Dallas, TX

Thriller Battery Fire

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	01.28.2021 09:00	0.5 ft	686416-001

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CASE NARRATIVE

Client Name: WSP USA

Project Name: Thriller Battery Fire

Project ID:	*1067741001*	Report Date:	*02.04.2021*
Work Order Number(s):	*686416*	Date Received:	*01.28.2021*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 686416

WSP USA, Dallas, TX

Thriller Battery Fire

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	01.28.2021 11:46
Lab Sample Id:	686416-001	Date Collected:	01.28.2021 09:00	Sample Depth:	0.5 ft

Analytical Method: Chloride by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 01.28.2021 16:36 — % Moisture:

Seq Number: 3149348 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**204**	100	mg/kg	01.29.2021 06:17		10

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM

Analyst: ARM — Date Prep: 02.02.2021 12:00 — % Moisture:

Seq Number: 3149864 — Basis: Wet Weight

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.02.2021 19:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	**566**	49.8	mg/kg	02.02.2021 19:10		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**59.6**	49.8	mg/kg	02.02.2021 19:10		1
Total GRO-DRO	PHC628	**566**	49.8	mg/kg	02.02.2021 19:10		1
Total TPH	PHC635	**626**	49.8	mg/kg	02.02.2021 19:10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	02.02.2021 19:10	
o-Terphenyl	84-15-1	108	%	70-130	02.02.2021 19:10	

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Certificate of Analytical Results 686416

WSP USA, Dallas, TX

Thriller Battery Fire

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	01.28.2021 11:46
Lab Sample Id:	686416-001	Date Collected:	01.28.2021 09:00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 10:33	% Moisture:	
Seq Number:	3149409			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.29.2021 15:17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.29.2021 15:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.29.2021 15:17	
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.29.2021 15:17	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 686416

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WSP USA

Thriller Battery Fire

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149348 — Matrix: Solid — Date Prep: 01.28.2021
MB Sample Id: 7720319-1-BLK — LCS Sample Id: 7720319-1-BKS — LCSD Sample Id: 7720319-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	212	106	208	104	90-110	2	20	mg/kg	01.29.2021 04:23	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149348 — Matrix: Soil — Date Prep: 01.28.2021
Parent Sample Id: 686312-081 — MS Sample Id: 686312-081 S — MSD Sample Id: 686312-081 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	488	202	658	84	655	83	90-110	0	20	mg/kg	01.29.2021 04:40	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3149348 — Matrix: Soil — Date Prep: 01.28.2021
Parent Sample Id: 686411-003 — MS Sample Id: 686411-003 S — MSD Sample Id: 686411-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6170	202	6360	94	6360	94	90-110	0	20	mg/kg	01.29.2021 06:00	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3149864 — Matrix: Solid — Date Prep: 02.02.2021
MB Sample Id: 7720662-1-BLK — LCS Sample Id: 7720662-1-BKS — LCSD Sample Id: 7720662-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	971	97	991	99	70-130	2	20	mg/kg	02.02.2021 21:36	
Diesel Range Organics (DRO)	<50.0	1000	862	86	889	89	70-130	3	20	mg/kg	02.02.2021 21:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		90		93		70-130	%	02.02.2021 21:36
o-Terphenyl	109		89		96		70-130	%	02.02.2021 21:36

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3149864 — Matrix: Solid — Date Prep: 02.02.2021
MB Sample Id: 7720662-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.01.2021 11:43	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 686416

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WSP USA

Thriller Battery Fire

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3149864 Matrix: Soil Date Prep: 02.02.2021
Parent Sample Id: 686411-001 MS Sample Id: 686411-001 S MSD Sample Id: 686411-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1030	103	958	96	70-130	7	20	mg/kg	02.02.2021 13:08	
Diesel Range Organics (DRO)	<49.9	997	930	93	862	87	70-130	8	20	mg/kg	02.02.2021 13:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		83		70-130	%	02.02.2021 13:08
o-Terphenyl	90		84		70-130	%	02.02.2021 13:08

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3149409 Matrix: Solid Date Prep: 01.29.2021
MB Sample Id: 7720299-1-BLK LCS Sample Id: 7720299-1-BKS LCSD Sample Id: 7720299-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0772	77	0.0702	70	70-130	9	35	mg/kg	01.29.2021 11:45	
Toluene	<0.00200	0.100	0.0950	95	0.0874	87	70-130	8	35	mg/kg	01.29.2021 11:45	
Ethylbenzene	<0.00200	0.100	0.106	106	0.0977	98	71-129	8	35	mg/kg	01.29.2021 11:45	
m,p-Xylenes	<0.00400	0.200	0.232	116	0.213	107	70-135	9	35	mg/kg	01.29.2021 11:45	
o-Xylene	<0.00200	0.100	0.115	115	0.105	105	71-133	9	35	mg/kg	01.29.2021 11:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		90		88		70-130	%	01.29.2021 11:45
4-Bromofluorobenzene	120		125		120		70-130	%	01.29.2021 11:45

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3149409 Matrix: Soil Date Prep: 01.29.2021
Parent Sample Id: 686304-001 MS Sample Id: 686304-001 S MSD Sample Id: 686304-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0809	81	0.0873	86	70-130	8	35	mg/kg	01.29.2021 12:29	
Toluene	<0.00200	0.100	0.0875	88	0.0958	95	70-130	9	35	mg/kg	01.29.2021 12:29	
Ethylbenzene	<0.00200	0.100	0.0768	77	0.0896	89	71-129	15	35	mg/kg	01.29.2021 12:29	
m,p-Xylenes	<0.00401	0.200	0.160	80	0.186	92	70-135	15	35	mg/kg	01.29.2021 12:29	
o-Xylene	<0.00200	0.100	0.0814	81	0.0958	95	71-133	16	35	mg/kg	01.29.2021 12:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		90		70-130	%	01.29.2021 12:29
4-Bromofluorobenzene	119		124		70-130	%	01.29.2021 12:29

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 6864116

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

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc, Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 West Mermond
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	elizabeth.naka@wsp.com, dan.moir@wsp.com

Work Order Comments

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

Project Name:	Thriller Battery Fire	Turn Around	
Project Number:	1067741001 / NAPP2100428768	Routine	X
P.O. Number:	Eddy County	Rush:	
Sampler's Name:	Elizabeth Naka	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.2/3.0	Thermometer ID	
Received Intact:	(Yes) No	1-IR4-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	1/28/21	0900	0.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments: discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Elizabeth Naka	Clint Cahill	1-28-21 1146	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Inter-Office Shipment

IOS Number : 77261

Date/Time:	01.28.2021	Created by:	Cloe Clifton	Please send report to:	Jessica Kramer
Lab# From:	**Carlsbad**	Delivery Priority:		Address:	1089 N Canal Street
Lab# To:	**Midland**	Air Bill No.:	772762019427	E-Mail:	jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
686416-001	S	SS01	01.28.2021 09:00	SW8015MOD_NM	TPH by SW8015 Mod	02.03.2021	02.11.2021	JKR	GRO-DRO PHCC10C28	

Inter Office Shipment or Sample Comments:

Relinquished By: Cloe Clifton

Date Relinquished: 01.28.2021

Received By: Jessica Kramer

Date Received: 01.29.2021

Cooler Temperature: 0.3

Environment Testing Xenco

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 77261

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used :

Sent By: Cloe Clifton **Date Sent:** 01.28.2021 02.50 PM

Received By: Jessica Kramer **Date Received:** 01.29.2021 10.34 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Jessica Kramer Date: 01.29.2021

Jessica Kramer

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 01.28.2021 11.46.00 AM

Work Order #: 686416

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	TPH sent to Midland.
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 01.28.2021

Checklist reviewed by: Jessica Kramer Date: 01.28.2021

Jessica Kramer

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-391-1
Client Project/Site: Thriller

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

Attn: Dan Moir

JKramer

Authorized for release by:
3/29/2021 8:37:35 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: Thriller

Laboratory Job ID: 890-391-1

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Job ID: 890-391-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-391-1

Receipt
The samples were received on 3/18/2021 2:30 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 1.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH01 (890-391-1), PH01 A (890-391-2), PH02 (890-391-3), PH02 A (890-391-4), PH03 (890-391-5) and PH03 A (890-391-6).

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) and the matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-834 and analytical batch 880-847 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10. These analytes were biased high in the LCS, MS/MSD and were not detected in the associated samples; therefore, the data have been reported.

Client Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH01
Date Collected: 03/18/21 10:05
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/26/21 14:28	03/27/21 03:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/26/21 14:28*	*03/27/21 03:40*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/26/21 14:28*	*03/27/21 03:40*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+	49.9		mg/Kg		03/25/21 09:19	03/25/21 14:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/25/21 09:19	03/25/21 14:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/25/21 09:19	03/25/21 14:31	1
Total TPH	<49.9	U	49.9		mg/Kg		03/25/21 09:19	03/25/21 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/25/21 09:19*	*03/25/21 14:31*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/25/21 09:19*	*03/25/21 14:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.0**		4.95		mg/Kg			03/23/21 21:55	1

Client Sample ID: PH01 A
Date Collected: 03/18/21 10:10
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/26/21 14:28	03/27/21 04:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/26/21 14:28	03/27/21 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:00*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/24/21 09:46	03/25/21 19:01	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH01 A
Date Collected: 03/18/21 10:10
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/21 09:46	03/25/21 19:01	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/21 09:46	03/25/21 19:01	1
Total TPH	<49.8	U	49.8		mg/Kg		03/24/21 09:46	03/25/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:01*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.7**		5.04		mg/Kg			03/23/21 22:11	1

Client Sample ID: PH02
Date Collected: 03/18/21 10:20
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/26/21 14:28	03/27/21 04:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:21*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:21*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 19:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 19:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 19:22	1
Total TPH	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:22*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.4**		5.02		mg/Kg			03/23/21 22:16	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH02 A
Date Collected: 03/18/21 10:30
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/26/21 14:28	03/27/21 04:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/26/21 14:28	03/27/21 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:41*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/26/21 14:28*	*03/27/21 04:41*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/24/21 09:46	03/25/21 19:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/24/21 09:46	03/25/21 19:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:46	03/25/21 19:43	1
Total TPH	<49.9	U	49.9		mg/Kg		03/24/21 09:46	03/25/21 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:43*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/24/21 09:46*	*03/25/21 19:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.6**		4.98		mg/Kg			03/23/21 22:21	1

Client Sample ID: PH03
Date Collected: 03/18/21 10:40
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/26/21 14:28	03/27/21 05:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/26/21 14:28*	*03/27/21 05:02*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/26/21 14:28*	*03/27/21 05:02*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:04	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH03
Date Collected: 03/18/21 10:40
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:04	1
Total TPH	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/24/21 09:46*	*03/25/21 20:04*	*1*
o-Terphenyl	*118*		*70 - 130*	*03/24/21 09:46*	*03/25/21 20:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.8**		4.99		mg/Kg			03/23/21 22:26	1

Client Sample ID: PH03 A
Date Collected: 03/18/21 10:45
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/26/21 14:28	03/27/21 11:16	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/26/21 14:28	03/27/21 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/26/21 14:28*	*03/27/21 11:16*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/26/21 14:28*	*03/27/21 11:16*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:25	1
Total TPH	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/24/21 09:46*	*03/25/21 20:25*	*1*
o-Terphenyl	*118*		*70 - 130*	*03/24/21 09:46*	*03/25/21 20:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.9**		5.00		mg/Kg			03/23/21 22:42	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-391-1	PH01	114	101
890-391-2	PH01 A	112	102
890-391-3	PH02	109	102
890-391-4	PH02 A	108	100
890-391-5	PH03	107	101
890-391-6	PH03 A	107	103
LCS 880-910/1-A	Lab Control Sample	102	101
LCSD 880-910/2-A	Lab Control Sample Dup	102	100
MB 880-803/5-A	Method Blank	102	95
MB 880-910/5-A	Method Blank	104	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-391-1	PH01	110	110
890-391-2	PH01 A	99	112
890-391-3	PH02	101	113
890-391-4	PH02 A	98	107
890-391-5	PH03	103	118
890-391-6	PH03 A	102	118
LCS 880-799/2-A	Lab Control Sample	115	108
LCS 880-834/2-A	Lab Control Sample	108	102
LCSD 880-799/3-A	Lab Control Sample Dup	109	102
LCSD 880-834/3-A	Lab Control Sample Dup	103	95
MB 880-799/1-A	Method Blank	90	97
MB 880-834/1-A	Method Blank	102	107

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-803/5-A
Matrix: Solid
Analysis Batch: 904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 803

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/24/21 10:57*	*03/26/21 14:32*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/24/21 10:57*	*03/26/21 14:32*	*1*

Lab Sample ID: MB 880-910/5-A
Matrix: Solid
Analysis Batch: 904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 910

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/26/21 14:28*	*03/27/21 01:50*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/26/21 14:28*	*03/27/21 01:50*	*1*

Lab Sample ID: LCS 880-910/1-A
Matrix: Solid
Analysis Batch: 904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 910

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09929		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1051		mg/Kg		105	70 - 130		
Toluene			0.100	0.1012		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2131		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1061		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

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

Lab Sample ID: LCSD 880-910/2-A
Matrix: Solid
Analysis Batch: 904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 910

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1019		mg/Kg		102	70 - 130	3	35
Ethylbenzene			0.100	0.1067		mg/Kg		107	70 - 130	1	35
Toluene			0.100	0.1036		mg/Kg		104	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2144		mg/Kg		107	70 - 130	1	35
o-Xylene			0.100	0.1076		mg/Kg		108	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-799/1-A
Matrix: Solid
Analysis Batch: 832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 799

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 11:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 11:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 11:36	1
Total TPH	<50.0	U	50.0		mg/Kg		03/24/21 09:46	03/25/21 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/24/21 09:46*	*03/25/21 11:36*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/24/21 09:46*	*03/25/21 11:36*	*1*

Lab Sample ID: LCS 880-799/2-A
Matrix: Solid
Analysis Batch: 832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 799

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1179		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1077		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-799/3-A
Matrix: Solid
Analysis Batch: 832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 799

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1185		mg/Kg		118	70 - 130	0	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

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

Lab Sample ID: LCSD 880-799/3-A
Matrix: Solid
Analysis Batch: 832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 799

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1069		mg/Kg		107	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: MB 880-834/1-A
Matrix: Solid
Analysis Batch: 847

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 834

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Total TPH	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/25/21 09:19*	*03/25/21 12:03*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/25/21 09:19*	*03/25/21 12:03*	*1*

Lab Sample ID: LCS 880-834/2-A
Matrix: Solid
Analysis Batch: 847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 834

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1376	*+	mg/Kg		138	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1123		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-834/3-A
Matrix: Solid
Analysis Batch: 847

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 834

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1230		mg/Kg		123	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	1109		mg/Kg		111	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

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

Lab Sample ID: LCSD 880-834/3-A
Matrix: Solid
Analysis Batch: 847

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 834

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*95*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-678/1-A
Matrix: Solid
Analysis Batch: 764

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/23/21 21:40	1

Lab Sample ID: LCS 880-678/2-A
Matrix: Solid
Analysis Batch: 764

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	249.5		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-678/3-A
Matrix: Solid
Analysis Batch: 764

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	246.7		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-391-1 MS
Matrix: Solid
Analysis Batch: 764

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	40.0		248	282.1		mg/Kg		98	90 - 110		

Lab Sample ID: 890-391-1 MSD
Matrix: Solid
Analysis Batch: 764

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40.0		248	281.2		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

GC VOA

Prep Batch: 803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-803/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Total/NA	Solid	8021B	910
890-391-2	PH01 A	Total/NA	Solid	8021B	910
890-391-3	PH02	Total/NA	Solid	8021B	910
890-391-4	PH02 A	Total/NA	Solid	8021B	910
890-391-5	PH03	Total/NA	Solid	8021B	910
890-391-6	PH03 A	Total/NA	Solid	8021B	910
MB 880-803/5-A	Method Blank	Total/NA	Solid	8021B	803
MB 880-910/5-A	Method Blank	Total/NA	Solid	8021B	910
LCS 880-910/1-A	Lab Control Sample	Total/NA	Solid	8021B	910
LCSD 880-910/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	910

Prep Batch: 910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Total/NA	Solid	5035	
890-391-2	PH01 A	Total/NA	Solid	5035	
890-391-3	PH02	Total/NA	Solid	5035	
890-391-4	PH02 A	Total/NA	Solid	5035	
890-391-5	PH03	Total/NA	Solid	5035	
890-391-6	PH03 A	Total/NA	Solid	5035	
MB 880-910/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-910/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-910/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-2	PH01 A	Total/NA	Solid	8015NM Prep	
890-391-3	PH02	Total/NA	Solid	8015NM Prep	
890-391-4	PH02 A	Total/NA	Solid	8015NM Prep	
890-391-5	PH03	Total/NA	Solid	8015NM Prep	
890-391-6	PH03 A	Total/NA	Solid	8015NM Prep	
MB 880-799/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-799/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-799/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-2	PH01 A	Total/NA	Solid	8015B NM	799
890-391-3	PH02	Total/NA	Solid	8015B NM	799
890-391-4	PH02 A	Total/NA	Solid	8015B NM	799
890-391-5	PH03	Total/NA	Solid	8015B NM	799
890-391-6	PH03 A	Total/NA	Solid	8015B NM	799
MB 880-799/1-A	Method Blank	Total/NA	Solid	8015B NM	799
LCS 880-799/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	799
LCSD 880-799/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	799

QC Association Summary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

GC Semi VOA

Prep Batch: 834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Total/NA	Solid	8015NM Prep	
MB 880-834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Total/NA	Solid	8015B NM	834
MB 880-834/1-A	Method Blank	Total/NA	Solid	8015B NM	834
LCS 880-834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	834
LCSD 880-834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	834

HPLC/IC

Leach Batch: 678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Soluble	Solid	DI Leach	
890-391-2	PH01 A	Soluble	Solid	DI Leach	
890-391-3	PH02	Soluble	Solid	DI Leach	
890-391-4	PH02 A	Soluble	Solid	DI Leach	
890-391-5	PH03	Soluble	Solid	DI Leach	
890-391-6	PH03 A	Soluble	Solid	DI Leach	
MB 880-678/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-678/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-678/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-391-1 MS	PH01	Soluble	Solid	DI Leach	
890-391-1 MSD	PH01	Soluble	Solid	DI Leach	

Analysis Batch: 764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-391-1	PH01	Soluble	Solid	300.0	678
890-391-2	PH01 A	Soluble	Solid	300.0	678
890-391-3	PH02	Soluble	Solid	300.0	678
890-391-4	PH02 A	Soluble	Solid	300.0	678
890-391-5	PH03	Soluble	Solid	300.0	678
890-391-6	PH03 A	Soluble	Solid	300.0	678
MB 880-678/1-A	Method Blank	Soluble	Solid	300.0	678
LCS 880-678/2-A	Lab Control Sample	Soluble	Solid	300.0	678
LCSD 880-678/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	678
890-391-1 MS	PH01	Soluble	Solid	300.0	678
890-391-1 MSD	PH01	Soluble	Solid	300.0	678

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH01
Date Collected: 03/18/21 10:05
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 03:40	MR	XM
Total/NA	Prep	8015NM Prep			834	03/25/21 09:19	DM	XM
Total/NA	Analysis	8015B NM		1	847	03/25/21 14:31	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 21:55	WP	XM

Client Sample ID: PH01 A
Date Collected: 03/18/21 10:10
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 04:00	MR	XM
Total/NA	Prep	8015NM Prep			799	03/24/21 09:46	DM	XM
Total/NA	Analysis	8015B NM		1	832	03/25/21 19:01	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 22:11	WP	XM

Client Sample ID: PH02
Date Collected: 03/18/21 10:20
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 04:21	MR	XM
Total/NA	Prep	8015NM Prep			799	03/24/21 09:46	DM	XM
Total/NA	Analysis	8015B NM		1	832	03/25/21 19:22	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 22:16	WP	XM

Client Sample ID: PH02 A
Date Collected: 03/18/21 10:30
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 04:41	MR	XM
Total/NA	Prep	8015NM Prep			799	03/24/21 09:46	DM	XM
Total/NA	Analysis	8015B NM		1	832	03/25/21 19:43	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 22:21	WP	XM

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Client Sample ID: PH03
Date Collected: 03/18/21 10:40
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 05:02	MR	XM
Total/NA	Prep	8015NM Prep			799	03/24/21 09:46	DM	XM
Total/NA	Analysis	8015B NM		1	832	03/25/21 20:04	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 22:26	WP	XM

Client Sample ID: PH03 A
Date Collected: 03/18/21 10:45
Date Received: 03/18/21 14:30

Lab Sample ID: 890-391-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		1	904	03/27/21 11:16	MR	XM
Total/NA	Prep	8015NM Prep			799	03/24/21 09:46	DM	XM
Total/NA	Analysis	8015B NM		1	832	03/25/21 20:25	AM	XM
Soluble	Leach	DI Leach			678	03/22/21 10:54	CH	XM
Soluble	Analysis	300.0		1	764	03/23/21 22:42	WP	XM

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 890-391-1
Project/Site: Thriller

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Thriller

Job ID: 890-391-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-391-1	PH01	Solid	03/18/21 10:05	03/18/21 14:30	
890-391-2	PH01 A	Solid	03/18/21 10:10	03/18/21 14:30	
890-391-3	PH02	Solid	03/18/21 10:20	03/18/21 14:30	
890-391-4	PH02 A	Solid	03/18/21 10:30	03/18/21 14:30	
890-391-5	PH03	Solid	03/18/21 10:40	03/18/21 14:30	
890-391-6	PH03 A	Solid	03/18/21 10:45	03/18/21 14:30	

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP	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:	(303) 887-2946	Email:	Spencer.Lo@wsp.com,Korey.Kennedy@wsp.com,Dan.Moir@wsp.com

Work Order Comments

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

Project Name:	Thriller	Turn Around	
Project Number:	TE012921012	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	THM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

890-391 Chain of Custody

Work Order Notes

Cost Center: 1067741001
Incident ID: NAPP2100428768

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH01	S	3.18.21	1005	2'	1	X	X	X	
PH01A	S	3.18.21	1010	4'	1	X	X	X	
PH02	S	3.18.21	1020	2'	1	X	X	X	
PH02A	S	3.18.21	1030	4'	1	X	X	X	
PH03	S	3.18.21	1040	2'	1	X	X	X	
PH03A	S	3.18.21	1045	4'	1	X	X	X	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Spencer Lo	Cole Curtis	3.18.21 1430			
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-391-1
SDG Number:

Login Number: 391
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: 890-391-1
SDG Number:

Login Number: 391
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/19/21 12:51 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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?	N/A	
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").	N/A	

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

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

CONDITIONS

Action 24935

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 24935
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	6/11/2021