

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	NRM2020232730
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 32.33649 Longitude -103.83712
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Hudson 1 Fed Com 008H	Site Type	Flowline
Date Release Discovered	7/3/2020	API#	(if applicable)

Unit Letter	Section	Township	Range	County
F	1	23S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 2.52	Volume Recovered (bbls) .7
☒ Produced Water	Volume Released (bbls) 15.52	Volume Recovered (bbls) 4.3
	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)

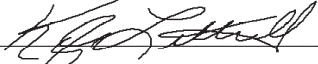
Cause of Release The 3 1/2" flow line was externally corroded causing a release in the pasture. A clamp was installed and flow line was cleared. A vacuum truck was dispatched and recovered 5 barrels of fluid. A third party contractor will be retained for remediation activities.

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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? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

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 <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kyle Littrell</u>	Title: <u>SH&E Supervisor</u>
Signature: <u></u>	Date: <u>7-14-20</u>
email: <u>Kyle_Littrell@xtoenergy.com</u>	Telephone: <u>432-221-7331</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>7/20/2020</u>

Location:	Hudson 1 Fed Com 008H	
Spill Date:	7/3/2020	
Area 1		
Approximate Area =	1358.00	sq. ft.
Average Saturation (or depth) of spill =	4.00	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	2.39	bbls
Total Produced Water =	14.70	bbls
Area 2		
Approximate Area =	514.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.08	bbls
Total Produced Water =	0.49	bbls
Area 3		
Approximate Area =	347.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.05	bbls
Total Produced Water =	0.33	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	2.52	bbls
Total Produced Water =	15.52	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.70	bbls
Total Produced Water =	4.30	bbls

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas 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.

Oil Conservation Division

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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: Environmental Manager

Signature:  Date: 5/25/2021

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

OCD Only

Received by: _____ Date: _____

Incident ID	NRM2020232730
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Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Kyle Littrell Title: Environmental Manager
Signature:  Date: 5/25/2021
email: kyle_littrell@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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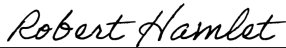
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public 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: Environmental Manager
Signature:  Date: 5/25/2021
email: kyle_littrell@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 9/20/2021

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 9/20/2021



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

May 25, 2021

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

**RE: Remediation Work Plan
Hudson 1 Fed Com 008H
Incident Number NRM2020232730
Eddy County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Remediation Work Plan detailing remediation activities completed to date and a proposed work plan to address residual impacted soil at the Hudson 1 Fed Com 008H (Site) in Unit F, Section 1, Township 23 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the remediation activities completed to date was to address impacts to soil resulting from the release of crude oil and produced water at the Site by safely excavating impacted soil to the extent possible based on Site conditions and as allowed by XTO safety policy. The proposed work plan is designed to address remaining impacts to soil by installing a 20-mil impermeable liner in the subsurface of the pasture excavation.

RELEASE BACKGROUND

On July 3, 2020, a corroded 3.5-inch flow line resulted in the release of 2.52 barrels (bbls) of crude oil and 15.52 bbls of produced water onto the pasture area west of the pad. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 0.7 bbls of crude oil and 4.3 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on July 14, 2020. The release was assigned Incident Number NRM2020232730.

The release extent overlapped a historical release (Remediation Permit Number 2RP-1732) and the associated buried liners. A closure request was submitted for the historical release in December 2014 and closure was approved by NMOCD on November 4, 2015. The approximate locations of the historical buried liners are depicted on Figure 2.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code



(NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321937103503701, located approximately 0.73 miles southwest of the Site. The groundwater well was most recently measured in November 1992 has a reported depth to groundwater of 251 feet bgs and a total depth of 317 feet bgs.

On May 22, 2019, a soil boring (C-04325) was drilled within 0.5 miles of the Site utilizing a track-mounted sonic drill rig. Soil boring C-04325 was drilled to a depth of 150 feet bgs. A WSP geologist logged and described soils continuously. The lithologic soil sampling log is included in Attachment 1. No moisture or groundwater was encountered during drilling activities. The location of the borehole is approximately 0.5 miles east of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 150 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is a seasonal stream, located approximately 3,300 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On July 16, 2020, 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 four preliminary assessment soil samples (SS01 through SS04) within the release extent from a depth



of 0.5 feet bgs to assess the lateral extent of the release. The preliminary soil samples were 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 locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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

Laboratory analytical results for preliminary soil samples SS01 through SS04 indicated that TPH and chloride concentrations exceeded the Closure Criteria. Based on visible staining in the release area and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between September 16, 2020 and September 24, 2020, WSP personnel were at the Site to oversee excavation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples. Excavation activities were performed using a track-mounted backhoe, hydrovac, and transport vehicle. Historical liners associated with Remediation Permit number 2RP-1732 were encountered in the excavation at depths ranging from 2 feet to 5 feet bgs. Impacted soil was excavated vertically to the depth of the historical liners.

Six surface flow lines and one buried 4-inch gas line run north-south through the center of the excavation area. No liner was installed within 10 feet of the active pipelines, leaving an approximate 20-foot gap between the historical liners within the active pipeline corridor. Impacted soil was excavated to an approximate depth of 4 to 5 feet bgs in the active pipeline corridor. The excavation area, active pipelines, and location of the historical liners are depicted on Figure 3. Photographic documentation was conducted during the excavation activities. A photographic log is included in Attachment 2.

Following removal of impacted soil to the extent possible, WSP collected composite soil samples from the sidewalls and floor of the excavation. The composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite sidewall samples (SW01 through SW15) were collected from the sidewalls of the excavation from depths ranging from the ground surface to 5 feet bgs.



Composite floor samples (FS01 through FS07) were collected from the floor of the unlined excavation in the pipeline corridor from depths ranging from 4 feet to 5 feet bgs. No floor samples were collected in the areas where liners were encountered in the floor of the excavation. The excavation extent and excavation soil sample locations are presented on Figure 3. The excavation soil samples were collected, handled, and analyzed as described above.

The excavation area measured approximately 5,800 square feet. A total of approximately 800 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

Laboratory analytical results for excavation sidewall samples SW01 through SW15 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for excavation floor samples FS01 through FS07 indicated that chloride concentrations exceeded the Closure Criteria. Floor samples FS03 and FS04 also exceeded the Closure Criteria for TPH. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are provided in Attachment 4. Based on the laboratory analytical results for the floor samples in the pipeline corridor, delineation activities were scheduled to determine the lateral and vertical extent of impacted soil.

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

During October and November 2020, WSP personnel returned to the Site to oversee delineation activities. Potholes PH01 through PH05 were advanced via track mounted backhoe within and around the release extent to assess the lateral and vertical extent of impacted soil. The potholes were advanced to depths ranging from 10 feet to 18 feet bgs. Potholes PH01 and PH04 were advanced to the north and south of the release extent to define the lateral extent of impacted soil. Potholes PH02, PH03, and PH05 were advanced within the release extent to define the vertical extent of impacted soil. Discrete delineation soil samples were collected from each pothole at depths ranging from 2 feet to 18 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 logs, which are included in Attachment 3. The delineation soil samples were handled and analyzed as described above. The pothole delineation soil sample locations are depicted on Figure 4.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 and PH04, collected north and south of the release extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria and successfully defined the lateral extent of impacted soil.



Laboratory analytical results for the delineation soil samples collected from potholes PH02, PH03, and PH05, collected within the release extent, indicated that chloride concentrations exceeded the Closure Criteria to a depth 18 feet bgs. Due to the depth limitations of the track-mounted backhoe, continued vertical delineation of chloride impacted soil via a truck-mounted hollow-stem auger rig was scheduled.

On March 25, 2021, WSP personnel returned to the Site to oversee additional delineation activities via a truck-mounted hollow stem auger rig. Boreholes BH01, BH02, and BH03 were advanced within the excavation near the former pothole PH02, PH03, and PH05 locations to vertically delineate chloride concentrations to below 600 mg/kg. Boreholes BH01 and BH03 were advanced to a depth of 40 feet bgs and borehole BH02 was advanced to a depth of 42 feet bgs. Delineation soil samples were collected from the boreholes at depths ranging from 6 feet to 42 feet bgs. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation soil samples were handled, and analyzed as described above at Xenco in Carlsbad, New Mexico. The borehole locations are presented on Figure 4.

Laboratory analytical results for the borehole delineation soil samples indicated that vertical delineation of chloride to below 600 mg/kg was achieved at a depth of 42 feet bgs in borehole BH02 and at a depth of 40 feet bgs in boreholes BH01 and BH03.

In summary:

- Impacted soil was removed to the depth of historical liners within the release extent, and excavation sidewall samples are compliant with the Site Closure Criteria.
- The release is defined laterally to the east and west by excavation sidewall samples and to the north and south by delineation samples from potholes PH01 and PH04.
- The release is defined vertically by the presence of historical liners in the floor of the excavation or by delineation samples from boreholes BH01 through BH03, advanced in the unlined portion of the excavation within the pipeline corridor.
- A small volume of TPH impacted soil was identified in floor samples FS03 and FS04, collected from a depth of 4 feet bgs within the unlined pipeline corridor.
- Vertical delineation of chloride impacted soil was achieved in boreholes BH01 through BH03 at a maximum depth of 42 feet bgs.
- Impacted soil remains in place beneath the active pipeline corridor in an approximate 20-foot by 150-foot area to a maximum depth of 42 feet bgs. Impacts are likely attributed to both the historical release and recent release at this Site.

PROPOSED REMEDIATION WORK PLAN

Due to the nature of the release, extent of contamination in the subsurface (chloride impacts to approximately 42 feet bgs, lack of access due active pipelines, and presence of existing historical

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liners), WSP proposes excavation of the TPH impacted soil at 4 feet bgs and installation of a liner in the pipeline corridor to mitigate further chloride impacts to the subsurface. WSP proposes to join the historical liners to include the area in the pipeline corridor. The liner would be installed as close as possible on either side of the buried gas line and joined to the historical liners to the east and west of the pipeline corridor. WSP does not believe additional excavation of chloride impacted soil is warranted, as impacts in the top 4 feet have been removed and groundwater is documented to be greater than 150 feet bgs in the area. Delineation and excavation soil sampling provided full lateral and vertical delineation of the remaining impacted soil left in place.

XTO requests to excavate the TPH impacted soil identified at 4 feet bgs and then install a 20-mil impermeable liner over the chloride impacted soil within the pipeline corridor. The liner will be installed in the excavation area within the pipeline corridor to join the historical liners, as shown on Figure 5. Upon completion of the liner installation, the excavation will be backfilled with locally procured topsoil and recontoured to match pre-existing conditions. XTO will complete the liner installation within 90 days of the date of approval of this work plan by NMOCD.

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

Sincerely,

WSP USA Inc.

A handwritten signature in black ink, appearing to read 'Spencer Lo'.

Spencer Lo
Staff Geologist

A handwritten signature in black ink, appearing to read 'Ashley L. Ager'.

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

cc: Kyle Littrell, XTO
Bureau of Land Management

Attachments:

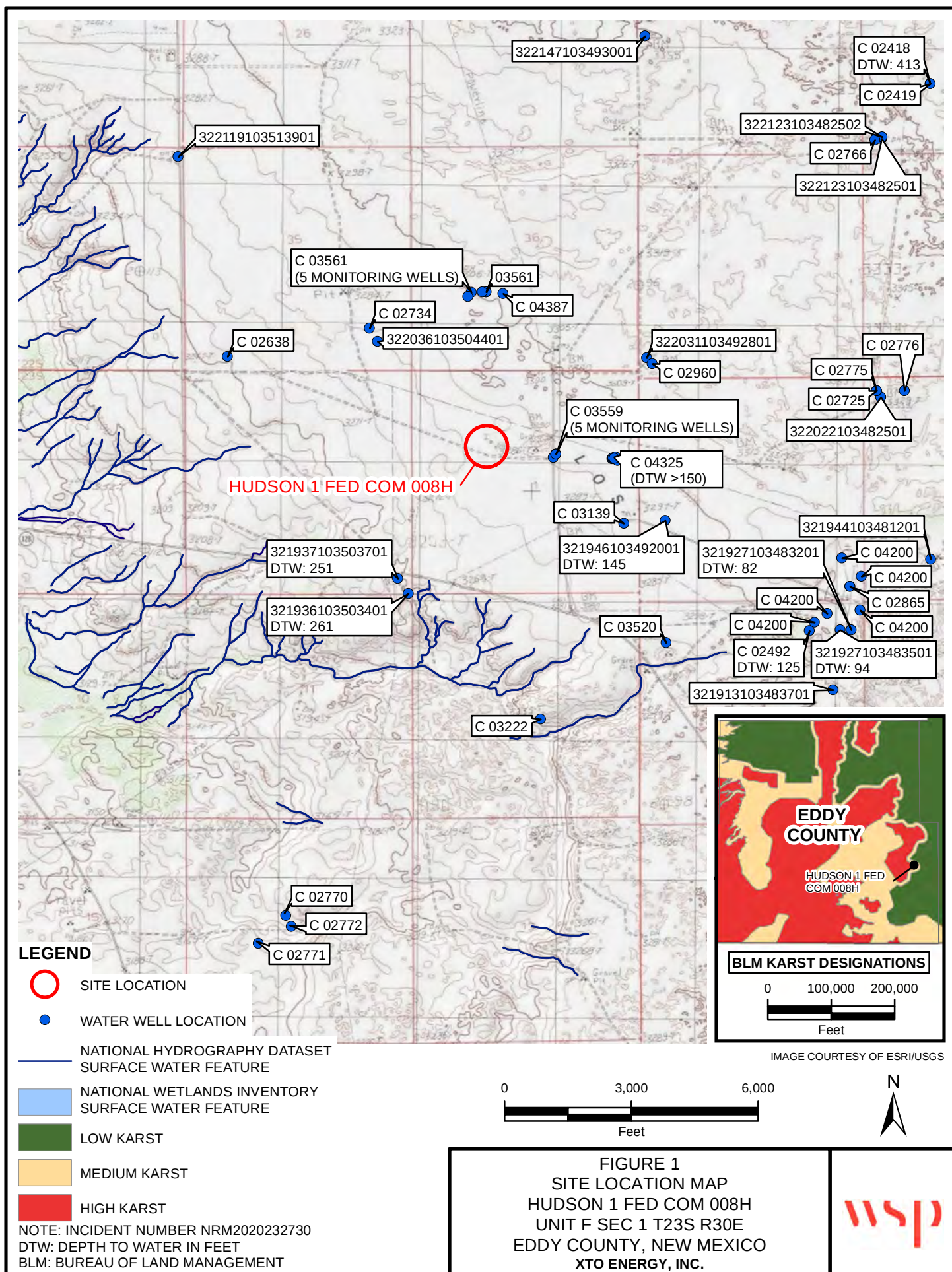
Figure 1 Site Location Map
Figure 2 Preliminary Soil Sample Locations
Figure 3 Excavation Soil Sample Locations
Figure 4 Delineation Soil Sample Locations
Figure 5 Proposed Liner Location
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Records

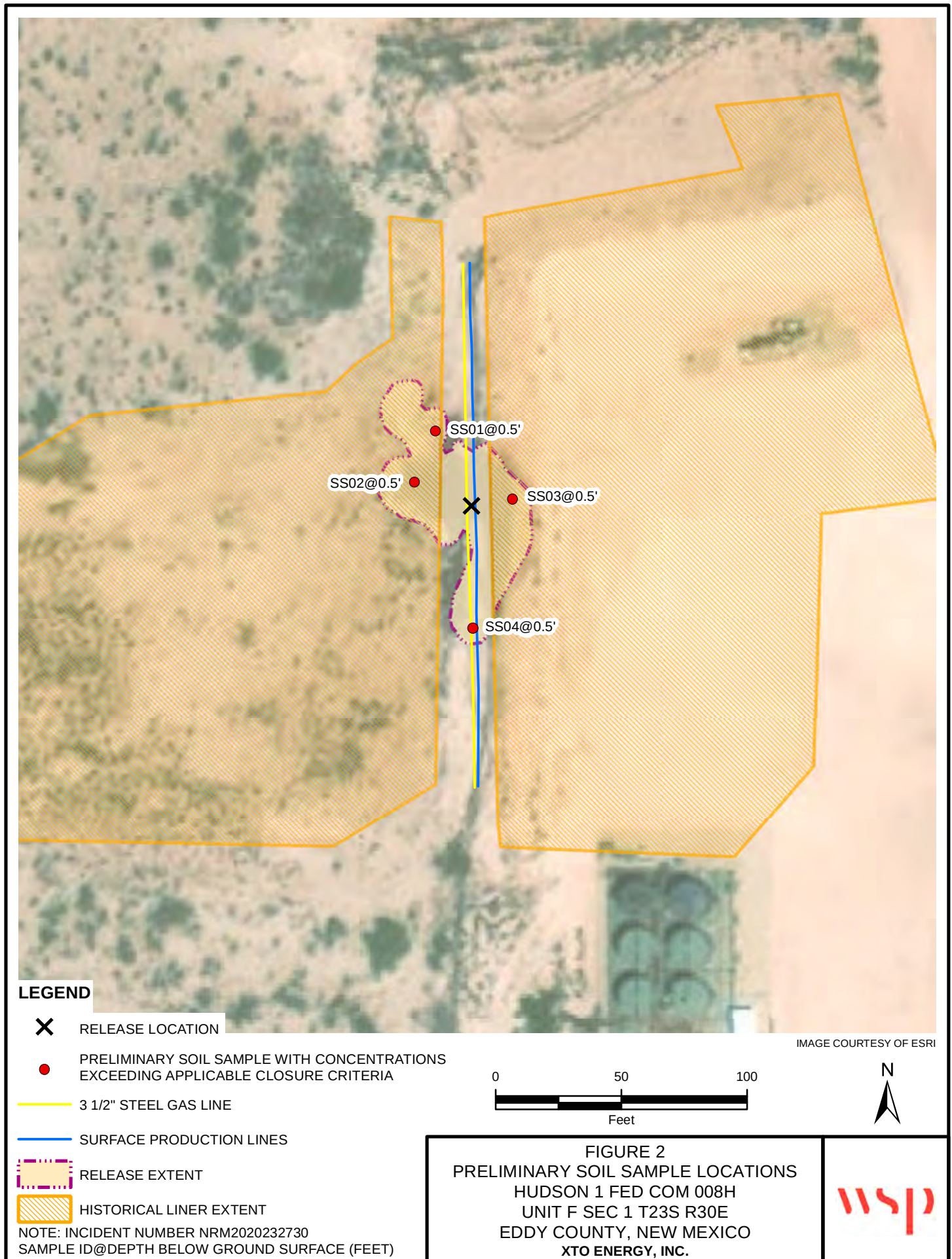


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Page 7

Attachment 2 Photographic Log
Attachment 3 Lithologic / Soil Sampling Log
Attachment 4 Laboratory Analytical Reports

FIGURES





P:\XTO Energy\GIS\MXD\012920105_HUDSON 1 FED COM 008H\012920105_FIG02_PRELIMINARY_2021_3.mxd

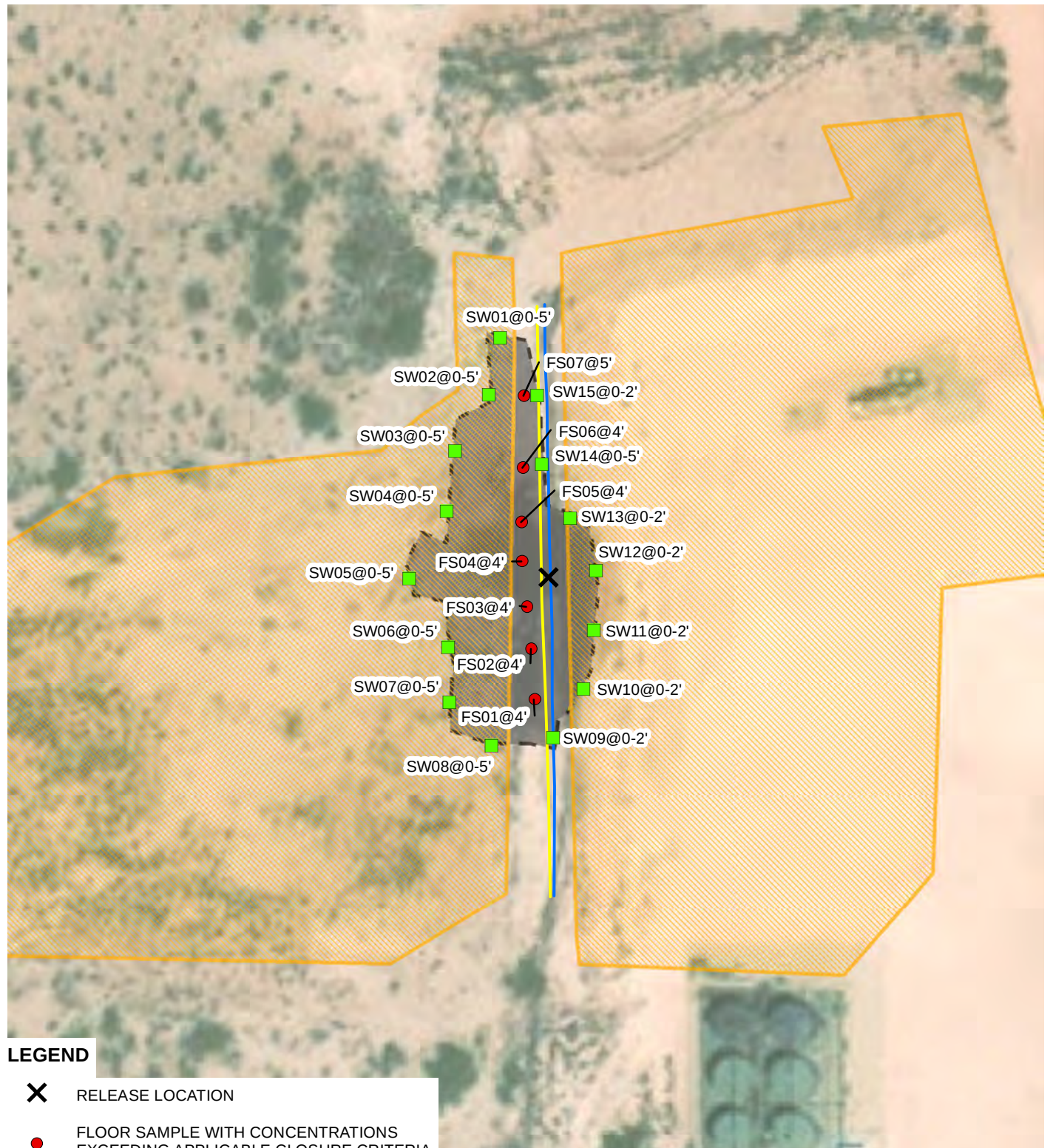


IMAGE COURTESY OF ESRI

LEGEND

RELEASE LOCATION

FLOOR SAMPLE WITH CONCENTRATIONS
EXCEEDING APPLICABLE CLOSURE CRITERIASIDEWALL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

3 1/2" STEEL GAS LINE

SURFACE PRODUCTION LINES



EXCAVATION EXTENT



HISTORICAL LINER EXTENT

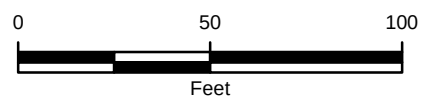
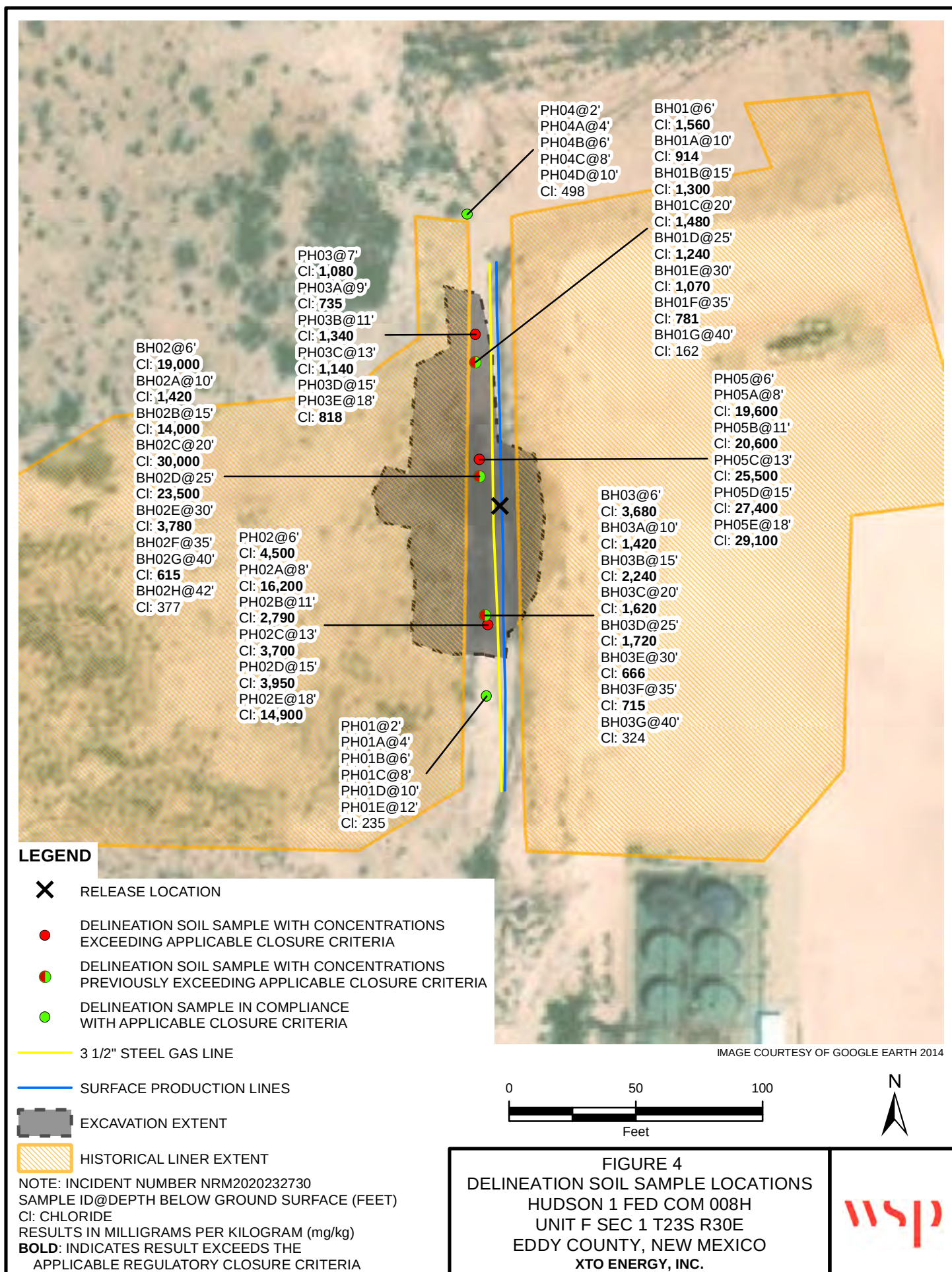
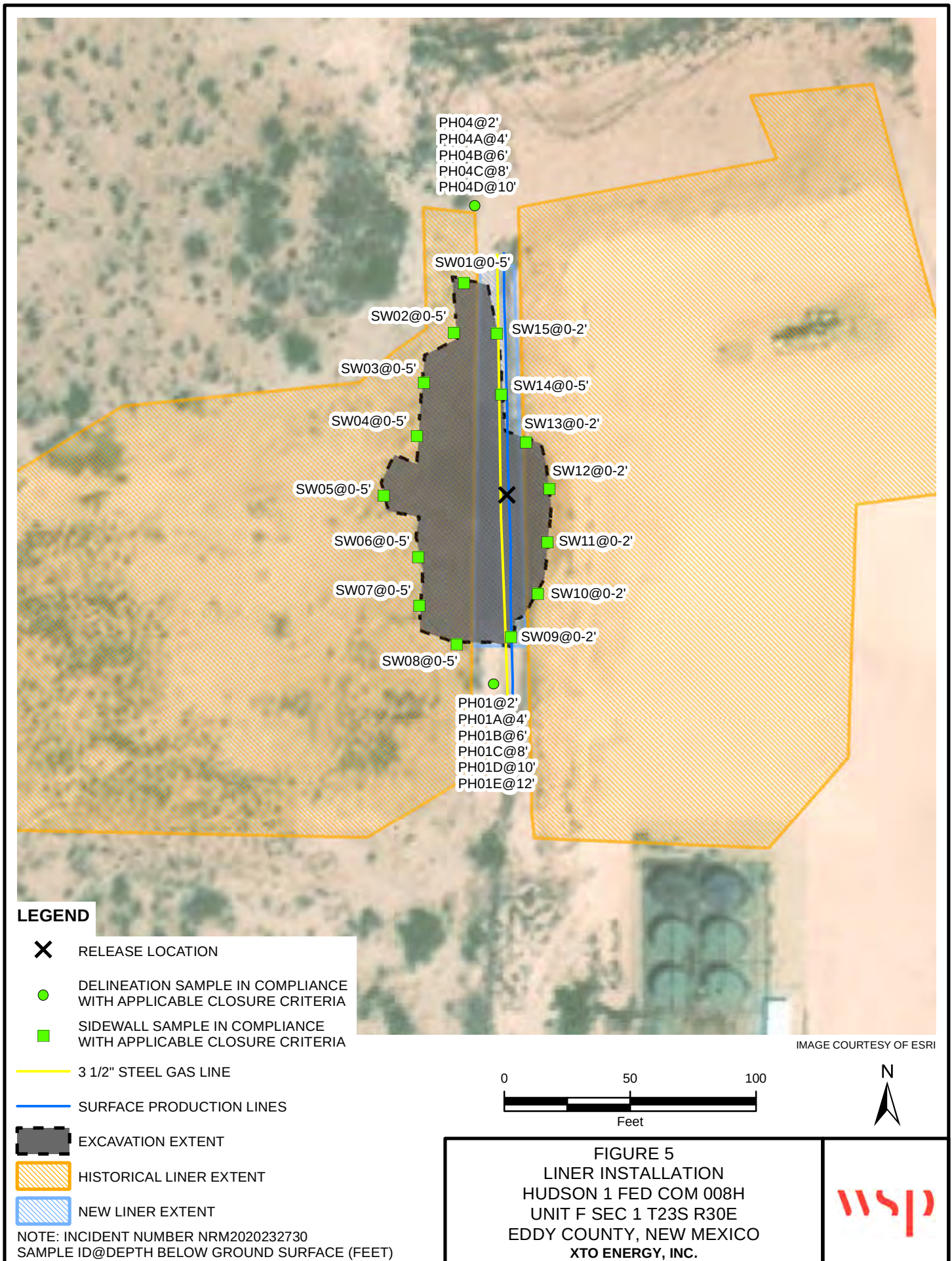
NOTE: INCIDENT NUMBER NRM2020232730
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
HUDSON 1 FED COM 008H
UNIT F SEC 1 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.







TABLES

Table 1
Soil Analytical Results
Hudson 1 Fed Com 008H
Incident Number NRM2020232730
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	NE	100	600
Surface Samples										
SS01	07/16/2020	0.5	<0.00500	1.51	15,100	<250	1,840	15,100	16,900	22,600
SS02	07/16/2020	0.5	<0.00490	1.92	17,200	<250	2,320	17,200	19,500	43,800
SS03	07/16/2020	0.5	<0.00556	1.67	21,400	<251	3,040	21,400	24,400	87,600
SS04	07/16/2020	0.5	<0.00490	0.599	19,800	413	2,490	20,200	22,700	53,800
Excavation Sidewall Samples										
SW01	09/21/2020	0 - 5	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	64.5
SW02	09/21/2020	0 - 5	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	170
SW03	09/21/2020	0 - 5	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	397
SW04	09/21/2020	0 - 5	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	293
SW05	09/21/2020	0 - 5	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	431
SW06	09/21/2020	0 - 5	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	28.8
SW07	09/21/2020	0 - 5	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	191
SW08	09/21/2020	0 - 5	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	134
SW09	09/22/2020	0 - 2	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	27.7
SW10	09/22/2020	0 - 2	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	425
SW11	09/22/2020	0 - 2	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	200
SW12	09/22/2020	0 - 2	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	226
SW13	09/22/2020	0 - 2	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	46.5
SW14	09/22/2020	0 - 5	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	222
SW15	09/22/2020	0 - 5	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	331

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Soil Analytical Results
Hudson 1 Fed Com 008H
Incident Number NRM2020232730
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	NE	100	600
Excavation Floor Samples										
FS01	05/13/2021	4	<0.00198	<0.00397	<49.9	78.5	<49.9	78.5	78.5	7,850
FS02	05/13/2021	4	<0.00199	<0.00398	<49.9	66.3	<49.9	66.3	66.3	775
FS03	05/13/2021	4	<0.00200	<0.00401	<50.0	596	133	596	729	4,380
FS04	05/13/2021	4	<0.00202	0.0394	<50.0	1,970	391	1,970	2,360	13,300
FS05	05/13/2021	4	<0.00202	<0.00403	<49.9	67.0	<49.9	67.0	67.0	13,600
FS06	05/13/2021	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	8,600
FS07	05/13/2021	5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,280
Delineation Samples										
PH01	10/08/2020	2	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	429
PH01A	10/08/2020	4	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	593
PH01B	10/08/2020	6	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	46.6
PH01C	10/08/2020	8	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	46.8
PH01D	10/08/2020	10	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	169
PH01E	10/08/2020	12	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	235
PH02	11/18/2020	6	<0.00201	<0.002010	<50.2	<50.2	<50.2	<50.20	<50.20	4,500
PH02A	11/18/2020	8	<0.00202	<0.002020	<49.9	<49.9	<49.9	<49.90	<49.90	16,200
PH02B	11/18/2020	11	<0.00200	<0.002000	<50.0	<50.0	<50.0	<50.00	<50.00	2,790
PH02C	11/18/2020	13	<0.00198	<0.001980	<50.2	<50.2	<50.2	<50.20	<50.20	3,700
PH02D	11/18/2020	15	<0.00198	<0.001980	<50.1	<50.1	<50.1	<50.10	<50.10	3,950
PH02E	11/18/2020	18	<0.00199	<0.001990	<49.8	<49.8	<49.8	<49.80	<49.80	14,900

Table 1
Soil Analytical Results
Hudson 1 Fed Com 008H
Incident Number NRM2020232730
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	NE	100	600
PH03	10/08/2020	7	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	1,080
PH03A	10/08/2020	9	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	735
PH03B	11/18/2020	11	<0.00200	<0.002000	<50.1	<50.1	<50.1	<50.10	<50.10	1,340
PH03C	11/18/2020	13	<0.00202	<0.002020	<50.1	<50.1	<50.1	<50.10	<50.10	1,140
PH03D	11/18/2020	15	<0.00202	<0.002020	<49.8	<49.8	<49.8	<49.80	<49.80	254
PH03E	11/18/2020	18	<0.00200	<0.002000	<49.9	<49.9	<49.9	<49.90	<49.90	818
PH04	11/18/2020	2	<0.00199	<0.001990	<49.8	<49.8	<49.8	<49.80	<49.80	544
PH04A	11/18/2020	4	<0.00200	<0.002000	<49.8	<49.8	<49.8	<49.80	<49.80	548
PH04B	11/18/2020	6	<0.00200	<0.002000	<49.9	<49.9	<49.9	<49.90	<49.90	511
PH04C	11/18/2020	8	<0.00202	<0.002020	<49.8	<49.8	<49.8	<49.80	<49.80	551
PH04D	11/18/2020	10	<0.00201	<0.002010	<50.1	<50.1	<50.1	<50.10	<50.10	498
PH05	11/18/2020	6	<0.00200	<0.002000	<49.8	<49.8	<49.8	<49.80	<49.80	131
PH05A	11/18/2020	8	<0.00200	<0.002000	<50.2	<50.2	<50.2	<50.20	<50.20	19,600
PH05B	11/18/2020	11	<0.00199	<0.001990	<49.8	<49.8	<49.8	<49.80	<49.80	20,600
PH05C	11/18/2020	13	<0.00200	<0.002000	<50.3	<50.3	<50.3	<50.30	<50.30	25,500
PH05D	11/18/2020	15	<0.00200	<0.002000	<49.8	<49.8	<49.8	<49.80	<49.80	27,400
PH05E	11/18/2020	18	<0.00200	<0.002000	<50.3	<50.3	<50.3	<50.30	<50.30	29,100
BH01	03/25/2021	6	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,560
BH01A	03/25/2021	10	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	914
BH01B	03/25/2021	15	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	1,300
BH01C	03/25/2021	20	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	1,480
BH01D	03/25/2021	25	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	1,240
BH01E	03/25/2021	30	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,070
BH01F	03/25/2021	35	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	781
BH01G	03/25/2021	40	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	162

Table 1
Soil Analytical Results
Hudson 1 Fed Com 008H
Incident Number NRM2020232730
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	NE	100	600
BH02	03/25/2021	6	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	19,000
BH02A	03/25/2021	10	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	1,420
BH02B	03/25/2021	15	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	14,000
BH02C	03/25/2021	20	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	30,000
BH02D	03/25/2021	25	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	23,500
BH02E	03/25/2021	30	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	3,780
BH02F	03/25/2021	35	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	581
BH02G	03/25/2021	40	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	615
BH02H	03/25/2021	42	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	377
BH03	03/25/2021	6	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	3,680
BH03A	03/25/2021	10	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	1,420
BH03B	03/25/2021	15	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	2,240
BH03C	03/25/2021	20	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	1,620
BH03D	03/25/2021	25	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,720
BH03E	03/25/2021	30	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	666
BH03F	03/25/2021	35	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	715
BH03G	03/25/2021	40	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	324

Notes:

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

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

NE - Not Established

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

Greyed data represents samples that were excavated

ATTACHMENT 1: REFERENCED WELL RECORD



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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

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GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 321937103503701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321937103503701 23S.30E.02.44414 A

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°19'40.0", Longitude 103°50'38.7" NAD83

Land-surface elevation 3,268.00 feet above NGVD29

The depth of the well is 317 feet below land surface.

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

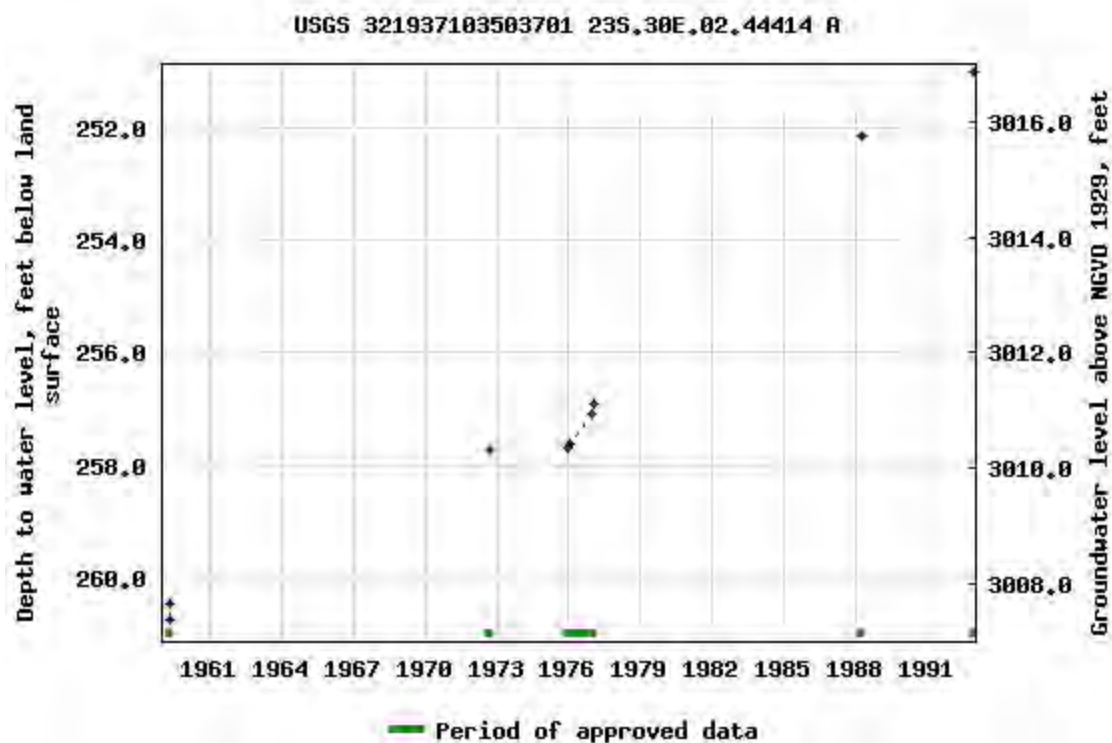
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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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

Page Last Modified: 2020-07-15 14:10:36 EDT

5.75 0.6 nadww01



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02492 POD2	3	2	2	07	23S	31E	611767	3576996 

Driller License: 1509 **Driller Company:** BMS DRILLING COMPANY

Driller Name: ROYBAL, JOE D. (LD)

Drill Start Date: 05/14/2012 **Drill Finish Date:** 05/31/2012 **Plug Date:**

Log File Date: 08/27/2013 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 30 GPM

Casing Size: 6.00 **Depth Well:** 400 feet **Depth Water:** 125 feet

Meter Number: 16563 **Meter Make:** MASTERMETER

Meter Serial Number: 53527168 **Meter Multiplier:** 1.0000

Number of Dials: 9 **Meter Type:** Diversion

Unit of Measure: Gallons **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:**

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
01/01/2015	2015	39508400	A	RPT		0
04/01/2015	2015	47638000	A	RPT		24.949
04/30/2015	2015	51651000	A	RPT		12.315
05/31/2015	2015	56066600	A	RPT		13.551
07/01/2015	2015	58740300	A	RPT		8.205
08/01/2015	2015	62357200	A	RPT		11.100
08/31/2015	2015	66100700	A	RPT		11.488
10/01/2015	2015	69225500	A	RPT		9.590
12/01/2015	2015	76310300	A	RPT		21.742
01/01/2016	2016	76310300	A	RPT		0
02/01/2016	2016	76310300	A	RPT		0
03/02/2016	2016	78841100	A	RPT		7.767
04/01/2016	2016	80952800	A	RPT		6.481
05/01/2016	2016	82055300	A	RPT		3.383
06/01/2016	2016	85605600	A	RPT		10.895
07/01/2016	2016	88115890	A	RPT		7.704
07/02/2016	2016	22996000	A	RPT		0
08/01/2016	2016	23851600	A	RPT		2.626
10/01/2016	2016	29486000	A	RPT		17.291
11/01/2016	2016	29738900	A	RPT		0.776
12/01/2016	2016	29738900	A	RPT		0
12/31/2016	2016	29738900	A	RPT		0

**YTD Meter Amounts:	Year	Amount
	2015	112.940
	2016	56.923

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

7/15/20 12:25 PM

POINT OF DIVERSION SUMMARY

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C-04325	Date: 5/22/19
Project Name: JRU 10		RP Number: 2RP-3404, 2RP-3464, 2RP-3179	
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: BEN BELILL	Method: <i>Soil C</i>
Lat/Long: 32.335339, 103.827697		Field Screening: CHLORIDES, TPH, BTEX, GRO, DRO, and MRO.	Hole Diameter: 6.15"
Total Depth: 150'		Comment: All Chloride test include a 60% error factor.	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0		(SP-SM)	
D	<112	0.5	N	MW01A	1	1'		silty SAND, dry, brn/red, poorly graded, f.-m., some vegetation.
D	<112	0.4	N	MW01A	2	2'		
D	<112	0.1	N	MW01B	3	3'		
D	<112	0.3	N	MW01C	4	4'	CALICHE	CALICHE w/ Sand, dry, lt brn/lt tan, pily caliche, some m. red sand, no odor.
P	<112	0.1	N	MW01D	5	5'		
D	<112	0.5	N	MW01E	6	6'		
D	<112	0.4	N	MW01F	7	7'		
D	<112	0.3	N	MW01G	8	8'		
D	403	0.1	N	MW01H	9	9'	SP	SAND w/ Caliche, dry, lt brn/brn, f.-m, poorly graded, no odor. SAA
D	345	0.8	N	MW01I	10	10'		
D	345	3.1	N	MW01J	11	11'	(SP-SM)	sandy SILT, dry, brn/red, sampled , no odor, some fine sand, pily graded, f.-m., no odor.
				MW01K	12	12'		

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier ████ C-04325 MW01	Date 5/22/19					
Project Name JRU 10		RP Number: 2RP-3464, 2RP-3179 2RP-3243						
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELILL	Method:					
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO	Hole Diameter: ████					
Total Depth:								
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
1650	D <112	1.6	N	MW01K	12	12'	(SP-Sm)	STH
	D <112	3.8	N	MW01L	13	13'		
	D <112	4.9	N	MW01M	14	14'		
	D <112	4.8	N	MW01N	15	15'		
	D <112	1.1	N	MW01O	16	16'		
	D <112	0	N	MW01P	17	17'		
	D <112	4.1	N	MW01Q	18	18'	ML	SILT, dm, ben/ind, no plastic, no cdo
	D <112	6.5	N	MW01R	19	19'		
	D <180	1.3	N	MW01S	20	20'		
	D <180	9.2	N	MW01T	21	21'		
	D <112	7.4	N	MW01U	22	22'		
1725	D <112	5.1	N	MW01V	23	23'		
					24	24'		

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: C-04325 MWD1	Date: 5/22/19					
LITHOLOGIC / SOIL BORING LOG		Project Name: JRU 10 Logged By: BEN BELILL	RP Number: 2RP-3464, 2RP-3179 2RP-3243 Method:					
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.	Hole Diameter:					
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	6.5	N	MWD1 AA	24	24	ML	SAA
D	<112	4.6	N	MWD1 X	25	25'		
D	<112	5.1	N	MWD1 Y	26	26'		
D	<112	9.4	N	MWD1 Z	27	27'		
D	<112	0.8	N	MWD1 AB	28	28		
D	<112	1.2	N	MWD1 AC	29	29		
D	<112	0.9	N	MWD1 AD	30	30		
D	<112	0.8	N	MWD1 AE	31	31		
D	<112	3.0	N	MWD1 AF	32	32		
D	<112	3.1	N	MWD1 AG	33	33		
D	<112	0.0	N	MWD1 AH	34	34		
	<112	0.0	N	MWD1 AI	35	35		
					36			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C-04325	Date: 5/22/14 - 5/23/14					
		Project Name: JRU 10	RP Number: 2RP-3464, 2RP-3179 2RP-3243					
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELJILL	Method:					
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.	Hole Diameter: 6.15"					
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	1.0	N	MW01 AF 36	36	36	CL	silty CLAY, dry, red/bra, low plasticity, no odor.
D	<112	0.0	N	MW01 AJ 37	37	37		
D	<112	1.5	N	MW01 AK 38	38	38		
D	<112	0.0	N	MW01 AL 39	39	39		
D	<112	0.0	N	MW01 AM 40	40	40		
D	<112	0.0	N	MW01 AN 41	41	41		
D	<112	1.4	N	MW01 AO 42	42	42		
D	<112	2.8	N	MW01 AP 43	43	43		
D	<112	1.8	N	MW01 AQ 44	44	44		
D	<112	2.5	N	MW01 AR 45	45	45		
D	<112	1.9	N	MW01 AS 46	46	46		
D	<112	2.0	N	MW01 AT 47	47	47		
					48			

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier MWD/C-04325		Date 5/23/19		
				Project Name: JRU 10		RP Number: 2RP-3464, 2RP-3179 2RP-3243		
LITHOLOGIC / SOIL BORING LOG				Logged By: BEN BELILL		Method:		
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.		Hole Diameter: 6.15"		Total Depth:		
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0730	D	<112	0.3	N	MWD1 AW 48	48	CL	silty CLAY, dry, red/brn, low plasticity, no odor
0735	D	<112	1.3	N	MWD1 AX 49	49		silty CLAY w/ Caliche, dry, red/brn, low plasticity, some poly coated tan caliche gravel, no odor
0740	D	<112	1.2	N	MWD1 AW 50	50		silty CLAY, dry, red/brn, low plasticity, no odor
0750	D	<112	1.2	N	MWD1 AX 51	51		
0800	D	<112	1.3	N	MWD1 AX 52	52		
0810	D	<112	1.5	N	MWD1 AZ 53	53		
	D	<112	0.1	N	MWD1 BA 54	54		
	D	<112	0.3	N	MWD1 BB 55	55		
	D	<112	2.0	N	MWD1 BC 56	56		
	D	<112	2.9	N	MWD1 BD 57	57		
	D	<112	3.8	N	MWD1 BE 58	58		
	D	<112	2.3	N	MWD1 BF 59	59		
					60			

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01C-04325		Date: 5/23/19		
				Project Name: JRU 10		RP Number: 2RP-3179, 2RP-3464, 2RP-5243		
LITHOLOGIC / SOIL BORING LOG				Logged By: BEN BELILL		Method:		
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.		Hole Diameter:		Total Depth:		
Comment All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	2.8	N	MW01B 60	60	60	CL	Silty CLAY, dry, brn/md, low plasticity, no odor.
P	<112	2.9	N	MW01B 61	61	61		
P	<112	2.8	N	MW01B 62	62	62		
D	<112	3.4	N	MW01B 63	63	63		
D	<112	1.6	N	MW01B 64	64	64		
D	<112	11.7	N	MW01B 65	65	65		
P	<112	4.5	N	MW01B 66	66	66		
P	<112	3.7	N	MW01B 67	67	67		
P	<112	1.9	N	MW01B 68	68	68		
D	<112	1.1	N	MW01B 69	69	69		
D	<112	2.3	N	MW01B 70	70	70		
D	<112	1.7	N	MW01B 71	71	71		
					72			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01C-04325 Date: 5/23/19						
Project Name: JRU 10		RP Number: 2RP-3179, 2RP-3464, 2RP-5243						
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELILL Method:						
Lat/Long:	Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO	Hole Diameter: Total Depth:						
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
P	<112	3.1	N	MW01BS 72	72	72	CL	Soft
B	<112	1.0	N	MW01BT 73	73	73		
D	<112	1.1	N	MW01BV 74	74	74		
D	<112	6.0	N	MW01BV 75	75	75		
D	<112	5.6	N	MW01BW 76	76	76		
D	<112	3.4	N	MW01BX 77	77	77		
D	<112	1.1	N	MW01BY 78	78	78		
P	243	1.2	N	MW01BZ 79	79	79		
D	<112	2.4	N	MW01CA 80	80	80		
B	<112	4.7	N	MW01CB 81	81	81		
D	<112	3.7	N	MW01CC 82	82	82		
P	<112	3.7	N	MW01CD 83	83	83		
					84			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: C-04325 Date: 5/23/19						
Project Name: JRU 10		RP Number: 2RP-3179, 2RP-3464, 2RP-5243						
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELILL Method:						
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.						
Hole Diameter:		Total Depth:						
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	4.9	N	MW01CE	84	84	CL	SLAY
D	<112	1.5	N	MW01CF	85	85		
D	<112	5.3	N	MW01CG	86	86		
D	<112	2.4	N	MW01CH	87	87		
D	<112	1.6	N	MW01CI	88	88		
D	<112	1.1	N	MW01CJ	89	89		
D	<112	0.9	N	MW01CK	90	90		
D	<112	3.6	N	MW01CL	91	91	CL	CLAY silty SLAY, dry, lt brn/red, low plasticity, no odor.
D	<112	3.8	N	MW01CM	92	92		
D	<112	1.4	N	MW01CN	93	93		
D	<112	1.2	N	MW01CO	94	94		
D	<112	0.8	N	MW01CP	95	95		

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01C-04325	Date: 5/23/19					
		Project Name: JRU 10	RP Number: 2RP-3179, 2RP-3464, 2RP-5243					
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELILL	Method:					
Lat/Long:	Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.	Hole Diameter:	Total Depth:					
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	1.4	N	MW01C Q	96	96	CL	silty CLAY, brn/red, low plasticity, no odor.
D	<112	4.2	N	MW01C R	97	97		
D	2112	2.2	N	MW01C S	98	98		
D	<112	1.8	N	MW01C T	99	99		
D	<112	1.1	N	MW01C U	100	100		
D	<112	1.5	N	MW01C V	101	101		
D	2112	0.4	N	MW01C W	102	102		
D	<112	1.1	N	MW01C X	103	103		
D	<112	1.6	N	MW01C Y	104	104		
D	<112	0.7	N	MW01C Z	105	105		
	<112	1.3	N	MW01C A	106	106		
	<112	0.6	N	MW01C B	107	107		
					108			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01 C-04325 Date: 5/23/19/5/24						
Project Name: JRU 10		RP Number: 2RP-3179, 2RP-3464, 2RP-5243						
LITHOLOGIC / SOIL BORING LOG		Logged By: BEN BELILL Method:						
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, MRO, and DRO.						
Hole Diameter:		Total Depth:						
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	1.3	N	MW01 D	72 108	108	CL	SAA
D	<112	0.3	N	MW01 D	73 109	109		
D	<112	0.6	N	MW01 D	74 110	110		
D	<112	0.6	N	MW01 D	75 111	111		
D	<112	0.5	N	MW01 D	76 112	112		
D	<112	3.5	N	MW01 D	77 113	113		
D	<112	5.3	N	MW01 D	78 114	114		
D	<112	1.3	N	MW01 D	79 115	115		
D	<112	3.3	N	MW01 D	80 116	116		
D	<112	2.9	N	MW01 D	81 117	117		
D	<112	3.3	N	MW01 D	82 118	118		
D	<112	4.8	N	MW01 D	83 119	119		
					84			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW0 C-04325 Date: 5/29/19 - 6/3/19						
Project Name: JRU 10		RP Number: 2RP-3404, 2RP-3464, 2RP-3179						
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: BEN BELILL						
Lat/Long:	Field Screening: CHLORIDES, TPH, BTEX, GRO, DRO, and MRO.	Hole Diameter: 6.15"						
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<112	3.8	N	MW01 D0	120	120	CL	SAA
D	<112	3.1	N	MW01 D1	121	121		
D	<112	1.2	N	MW01 D2	122	122		
D	<112	0.4	N	MW01 D3	123	123		
D	<112	0.5	N	MW01 D4	124	124		
D	<112	0.6	N	MW01 D5	125	125		
D	<112	0.8	N	MW01 D6	126	126		
D	<112	0.7	N	MW01 D7	127	127		
D	<112	1.0	N	MW01 D8	128	128		
D	<112	0.4	N	MW01 D9	129	129		
D	<112	0.5	N	MW01 D10	130	130		
D	<112	1.1	N	MW01 D11	131	131		
					132			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MWD/C-04325	Date: 6/3/19 - 6/4/19					
		Project Name: JRU 10	RP Number: 2RP-3404, 2RP-3464, 2RP-3179					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: BEN BELILL	Method:					
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, DRO, and MRO.	Hole Diameter: 6.15"					
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0	<112	0.8	N	MWD1EA	132	132	CL	SAA ↓ CLAY w/ gravel, dry, lt brn/red, low plasticity, no odor. ↓ CLAY silty CLAY, brown/red, low plasticity, no odor
0	<112	0.7	N	MWD1EB	133	133		
0	<112	0.8	N	MWD1EC	134	134		
0	<112	0.9	N	MWD1ED	135	135		
0	<112	0.6	N	MWD1EE	136	136		
1700	<112	0.7	N	MWD1EF	137	137		
64	<112	1.0	N	MWD1EG	138	138	CL	
0900	<112	0.9	N	MWD1EH	139	139		
0905	<112	3.8	N	MWD1EI	140	140	CL	
0910	<112	3.5	N	MWD1EJ	141	141		
0915	<112	3.1	N	MWD1EK	142	142		
0920	<112	1.8	N	MWD1EL	143	143		
0925					144			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: MW01C-04325 Date: 6/1/19						
Project Name: JRU 10		RP Number 2RP-3404, 2RP-3464, 2RP-3179						
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: BEN BELILL Method:						
Lat/Long:		Field Screening: CHLORIDES, TPH, BTEX, GRO, DRO, and MRO.						
Hole Diameter: 6.15"		Total Depth:						
Comment: All Chloride test include a 60% error factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
0930	Q	<112	3.5	N	MW01E M	144	CL	Silt
0935	D	<112	3.2	N	MW01E N	145		
0940	D	<112	2.7	N	MW01E O	146		
0945	D	<112	3.1	N	MW01E P	147		
0950	D	<112	3.0	N	MW01E Q	148		
0955	D	<112	1.8	N	MW01E R	149		
1000	D	<112	1.5	N	MW01E S	150		
					7			
					8			
					9			
					10			
					11			
					12			

FOR @ 150'

ATTACHMENT 2: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Hudson 1 Fed Com 008H Eddy County, New Mexico	TE012920105

Photo No.	Date	
1	July 15, 2020	
North facing view of release extent.		

Photo No.	Date	
2	July 15, 2020	
South facing view of release extent.		



PHOTOGRAPHIC LOG

XTO Energy, Inc.	Hudson 1 Fed Com 008H Eddy County, New Mexico	TE012920105
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Photo No.	Date	
3	July 29, 2020	
View of liner located during excavation activities.		 A photograph showing a deep excavation pit with reddish-brown soil. A white pipe or liner is visible at the bottom of the pit, partially submerged in a pool of water. The soil walls are steep and show some erosion.

Photo No.	Date	
4	July 29, 2020	
View of excavation activities.		 A wide-angle photograph of an excavation site. In the foreground, there is a large pile of dirt and debris. In the background, an excavator is visible, along with some industrial structures and a clear blue sky.



PHOTOGRAPHIC LOG

XTO Energy, Inc.	Hudson 1 Fed Com 008H Eddy County, New Mexico	TE012920105
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Photo No.	Date	
5	September 21, 2020	
South facing view of excavation extent.		

Photo No.	Date	
6	September 21, 2020	
North facing view of excavation extent.		



PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Hudson 1 Fed Com 008H Eddy County, New Mexico	TE012920105

Photo No.	Date	
7	March 26, 2021	
North facing view of delineation activities.		

Photo No.	Date	
8	March 26, 2021	
South facing view of delineation activities.		

ATTACHMENT 3: LITHOLOGIC/SAMPLING LOG

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								PH01		10/8/2020	
								Site Name: Hudson 1 Fed Com 008H			
								RP or Incident Number: NRM2020232730			
LTE Job Number: TE012920105											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long:				Field Screening:		Hole Diameter:		Total Depth:			
				Chloride, PID				12'			
Comments:											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
dry	378	0.0	n	PH01	2'	0	SP-SM	SAND w/ caliche, dry, brown, medium to fine grain, poorly graded, trace silt, no stain, no odor			
dry	563	0.0	n	PH01A	4'	5					
dry	<186	0.6	n	PH01B	6'						
dry	<186		n	PH01C	8'	8	CCHE	CALICHE w/ sand, dry, tan-off white, medium to fine grain, poorly graded sand, trace silt, no stain, no odor			
dry	<186	0.0	n	PH01D	10'	10					
dry	<186	0.0	n	PH01E	12'	12					
								TD @ 12' bgs			

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH02		11/18/2020	
						Site Name: Hudson 1 Fed Com 008H			
						RP or Incident Number: NRM2020232730			
						LTE Job Number: TE012920105			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: SL		Method: Trackhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					18'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0		Open Excavation	
dry	4,006	0.0	n	PH02	6'	5	SP-SM	SAND w/ caliche, dry, brown, medium to fine grain, poorly graded, trace silt, no stain, no odor	
dry	2,995	0.2	n	PH02A	8'				
						10			
dry	2,995	0.6	n	PH02B	11'				
dry	3,648	2.5	n	PH02C	13'				
dry	9,734	0.7	n	PH02D	15'	15			
dry	12,211	1.3	n	PH02E	18'	18			
								TD @ 18' bgs	

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH03		10/08/2020-11/18/2020	
						Site Name: Hudson 1 Fed Com 008H			
						RP or Incident Number: NRM2020232730			
						LTE Job Number: TE012920105			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: SL		Method: Trackhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					18'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0		Open Excavation	
dry	960	2.5	n	PH03	7'	5	SP-SM	SAND w/ caliche, dry, brown, medium to fine grain, poorly graded, trace silt, no stain, no odor	
dry	378	1.9	n	PH03A	9'	10			
dry	1,433	0.0	n	PH03B	11'				
dry	870	0.0	n	PH03C	13'				
dry	1,331	0.0	n	PH03D	15'	15			
dry	793	0.0	n	PH03E	18'	18			
TD @ 18' bgs									

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:		
					PH04		11/18/2020		
					Site Name: Hudson 1 Fed Com 008H				
					RP or Incident Number: NRM2020232730				
					LTE Job Number: TE012920105				
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: SL		Method: Trackhoe		
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					10'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
dry	320	2.2	n	PH04	2'	0	SM	SAND w/ caliche, dry, tan-brown, medium to fine grain, trace silt, poorly graded, no stain, no odor	
dry	320	1.7	n	PH04A	4'	5	CCHE	CALICHE, dry, tan-off white, no stain, no odor	
dry	499	0.0	n	PH04B	6'				
dry	563	0.0	n	PH04C	8'				
dry	435	0.0	n	PH04D	10'				
TD @ 10' bgs									

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH05		11/18/2020	
						Site Name: Hudson 1 Fed Com 008H			
						RP or Incident Number: NRM2020232730			
						LTE Job Number: TE012920105			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: SL		Method: Trackhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					18'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0			
dry	14,240	2.0	n	PH05	6'	5	SM	SAND w/ caliche, dry, tan-brown, medium to fine grain, trace silt, no stain, no odor	
dry	14,240	2.7	n	PH05A	8'				
dry	15,504	0.9	n	PH05B	11'	10			
dry	16,691	3.4	n	PH05C	13'				
dry	21,574	6.7	n	PH05D	15'	15			
dry	21,574	6.7	n	PH05E	18'	18			
								TD @ 18' bgs	

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: BH01		Date: 3/25/2021	
								Site Name: Hudson 1 Fed Com 008H			
								RP or Incident Number: NRM2020232730			
								LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By SL		Method: Hollow Stem Auger	
Lat/Long: 32.336691,-103.837162				Field Screening: Chloride, PID				Hole Diameter: 6"		Total Depth: TD @ 40'	
Comments: Field screening includes 60% error factor, backfilled with cuttings, 5'-15' backfilled with bentonite chips											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-5' OPEN EXCAVATION			
						5					
D	1,043	0.0	N	BH01	6'			5'-20' Sand, no odor, no stain, brown-tan, red-brown, m-f grained, well sorted, moderately consolidated, caliche gravel			
D	960	0.0	N	BH01A	10'	10	SP	-8'- no caliche content			
D	1,139	0.0	N	BH01B	15'	15					
D	1,043	0.0	N	BH01C	20'	20		-18'-20'-some clay content, non plastic, noncohesive			
D	1,542	0.0	N	BH01D	25'	25	SP-SC	20'-35' Sandey clay, brown, m-f grained, well sorted, no odor, no stain, non plastic, non cohesive, low consolidation			
D	1,433	0.0	N	BH01E	30'	30					
M	640	0.0	N	BH01F	35'	35					
M	186	0.0	N	BH01G	40'	40	SC	35'-40' Clayey sand, brown, no odor, no stain, m-f grained, low plasticity, cohesive			
								TD @ 40'			
						45					
						50					
						55					
						60					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: BH02		Date: 3/25/2021	
								Site Name: Hudson 1 Fed Com 008H			
								RP or Incident Number: NRM2020232730			
								LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By SL		Method: Hollow Stem Auger	
Lat/Long: 32.336567,-103.837158				Field Screening: Chloride, PID				Hole Diameter: 6"		Total Depth: TD @ 42'	
Comments: Field screening includes 60% error factor, backfilled with cuttings, 5'-15' backfilled with bentonite chips											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-5' OPEN EXCAVATION			
						5					
D	9,734	12.7	N	BH02	6'			5'-17' Sand, brown, m-f grained, well sorted, odor, no stain, low consolidation, caliche gravel			
D	2,304	0.2	N	BH02A	10'	10	SP	-7'- no odor			
D	10,496	0.6	N	BH02B	15'	15					
D	18,131	0.9	N	BH02C	20'	20		17'-36' Sandey clay, brown-red brown, no odor, no stain, low plasticity, cohesive, low consolidation, m-f grained, well sorted			
D	14,240	2.1	N	BH02D	25'	25	SP-SC	-20'- increase consolidation, moderately consolidated			
M	4,780	0.0	N	BH02E	30'	30					
M	1,043	0.0	N	BH02F	35'	35		-36'- high consolidation			
M	640	0.0	N	BH02G	40'	40	SC	36'-42' Clayey sand, brown, no odor, no stain, m-f grained, well sorted, medium plasticity, cohesive			
M	320	0.1	N	BH02H	42'			-40' sandstone, gray, high consolidation			
						45		TD @ 42'			
						50					
						55					
						60					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: BH03		Date: 3/25/2021	
								Site Name: Hudson 1 Fed Com 008H			
								RP or Incident Number: NRM2020232730			
								LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By SL		Method: Hollow Stem Auger	
Lat/Long: 32.336416,-103.837151				Field Screening: Chloride, PID				Hole Diameter: 6"		Total Depth: TD @ 40'	
Comments: Field screening includes 60% error factor, backfilled with cuttings, 5'-15' backfilled with bentonite chips											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-5' OPEN EXCAVATION			
						5					
D	2,790	1.2	N	BH03	6'			5'-18' Sand, brown, m-f grained, well sorted, no odor, no stain, low consolidation, caliche gravel			
D	2,022	0.0	N	BH03A	10'	10	SP				
D	2,451	0.0	N	BH03B	15'	15					
D	1,894	0.0	N	BH03C	20'	20		18'-29' Sandey Clay, brown-red brown, no odor, no stain, low plasticity, cohesive, low consolidation, m-f grained, well sorted			
D	2,022	0.0	N	BH03D	25'	25	SP-SC	-22' increase in clay content, low plasticity, cohesive			
D	960	0.0	N	BH03E	30'	30		29'-40' Clayey sand, brown, no odor, no stain, m-f grained, well sorted, medium plasticity, cohesive			
M	1,043	0.0	N	BH03F	35'	35	SC	-31'- increase in clay content, medium plasticity, cohesive			
M	563	0.0	N	BH03G	40'	40		TD @ 40'			
						45					
						50					
						55					
						60					

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



Eurofins Xenco, LLC
 Dept. 6383
 P.O. Box 11407
 Birmingham, AL 35246-6383
 Account Number: 0290729536
 Routing/ABA Number: 064000017
 Swift Number: UPNBUS44

Invoice No. 1496376

Client Information		Invoice Information
Invoice to:	XTO Energy	Invoice Date: 11.25.2020
Contact:	Kyle Littrell	
Address:	6401 Holiday Hill Rd Midland, TX 79707	Due Date: 12.25.2020
Project Name:	Hudson 1 Fed Com 008H	Terms: 30 Days
Project #:	TE012920105	PO #:
Requested by:	LT Environmental, Inc.	Lab PM: Jessica Kramer
Contact:	Dan Moir	
Comments:		

Products / Services	WO#	Matrix	TAT	Qty	Price	Ext Price
TPH by SW8015 Mod	678527	Solid	5 Day TAT	21	35.00	\$735.00
BTEX by EPA 8021B	678527	Solid	5 Day TAT	21	28.00	\$588.00
Chloride by EPA 300	678527	Solid	5 Day TAT	21	13.00	\$273.00
					Total:	\$1,596.00

All payments are due within 30 days of the invoice date unless otherwise determined by a written contract. Any dispute about invoices must be raised within 30 days of the invoice date. Challenge to analytical results will not entitle a customer to delay payment. Any invoice which remains outstanding after due date, may be additionally charged an administrative penalty of fifty dollars (\$50) and may carry interest at the rate of up to one percent (1%) per month. Payments with credit cards within 30 days will be charged a fee of one percent (1%).

Please send your payments to: Eurofins Xenco, LLC
 Dept. 6383
 P.O. Box 11407
 (281) 240-4200
 Birmingham, AL 35246-6383
 Account Number: 0290729536
 Routing/ABA Number: 064000017
 Swift Number: UPNBUS44

Make checks payable or Credit Card payments to Eurofins Xenco, LLC.

Make payments at <http://www.xenco.com/pay-online.php>



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

Chain of Custody

Work Order No: 6018527

www.xenco.com Page 1 of 3

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@ltenv.com, dmoir@ltenv.com, kkennedy@ltenv.com

Program: ☒ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other:	Work Order Comments

Project Name:	Hudson 1 Fed Com 008H	Turn Around
Project Number:	TE012920105	Routine ☒ Rush:
P.O. Number:		Due Date:
Sampler's Name:	Spencer Lo	

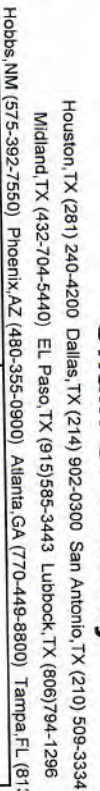
SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	0.1/2.2	Thermometer ID	TUN-001	
Received In tact:	☒ Yes ☐ No	Correction Factor:	-0.2	
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	01	
Sample Custody Seals:	☒ Yes ☐ No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers												
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)										
PH02	S	11/18/2020	1210	6'	X	X	X										
PH02A	S	11/18/2020	1220	8'	X	X	X										
PH02B	S	11/18/2020	1230	11'	X	X	X										
PH02C	S	11/18/2020	1245	13'	X	X	X										
PH02D	S	11/18/2020	1300	15'	X	X	X										
PH02E	S	11/18/2020	1315	18'	X	X	X										
PH03B	S	11/18/2020	1400	11'	X	X	X										
PH03C	S	11/18/2020	1415	13'	X	X	X										
PH03D	S	11/18/2020	1430	15'	X	X	X										
PH03E	S	11/18/2020	1445	18'	X	X	X										

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

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		11-19-20 1517			
3					
5					



Work Order No: 678577

Page 2 of 3

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: ☐									

[illegible]

Number of Containers

EPA 8015)

(EPA 0=8021)

ide (EPA 300.0)

[illegible]

71: Hg

1103

Signature)	Date/Time
------------	-----------

Date/Time	Relinquished by: (Sig
11/19/2015	2
	4
	6



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)

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Chain of Custody

Work Order No: 1678527

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slb@ltenv.com, dmoir@ltenv.com, kkenmedy@ltenv.com

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:	Hudson 1 Fed Com 008H	Turn Around		ANALYSIS REQUEST										Work Order Notes
Project Number:	TE012920105	Routine	☒											
P.O. Number:		Rush:												
Sampler's Name:	Spencer Lo	Due Date:												

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)											Sample Comments					
PH05E	S	11/18/2020	1650	18'	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 Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11/19/20 1542			



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-439-1

Laboratory Sample Delivery Group: TE012920105
Client Project/Site: Hudson 1 Fed Com 008H
Revision: 1

For:

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

Attn: Dan Moir

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

Authorized for release by:
4/20/2021 12:56:37 PM

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

LINKS

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results through
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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: Hudson 1 Fed Com 008H

Laboratory Job ID: 890-439-1
SDG: TE012920105

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Job ID: 890-439-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative**

Job Narrative
890-439-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 4/6/2021. The report (revision 1) is being revised due to: MB for TPH incorrect, Chloride re runs as well.

Receipt

The samples were received on 3/26/2021 11:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

Receipt Exceptions

The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH01 (890-439-1), BH01 A (890-439-2), BH01B (890-439-3), BH01C (890-439-4), BH01D (890-439-5), BH01E (890-439-6), BH01F (890-439-7), BH01G (890-439-8), BH02 (890-439-9), BH02A (890-439-10), BH02B (890-439-11), BH02C (890-439-12), BH02D (890-439-13), BH02E (890-439-14), BH02F (890-439-15), BH02G (890-439-16), BH02H (890-439-17), BH03 (890-439-18), BH03A (890-439-19), BH03B (890-439-20), BH03C (890-439-21), BH03D (890-439-22), BH03E (890-439-23), BH03F (890-439-24) and BH03G (890-439-25). BTEX8021

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH03G (890-439-25). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015B NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-1059 and analytical batch 880-1088 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015B NM: The method blank associated with preparation batch 880-1065 and analytical batch 880-1054 contained <AffectedA Diesel Range Organics (Over C10-C28), Oil Range Organics (Over C28-C36), Gasoline Range Organics (GRO)-C6-C10 and Total TPH nalytes> greater than one-half the reporting limit (RL). The samples could not be re-analyzed because they have broken hold. The sample results have been qualified and reported. The Method Blank was inadvertently spiked as an LCS, however the method blanks and cleaning blanks preceding and following were indicative that blanks were in control.

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

General Chemistry

Method 300.0: The method blank for preparation batch 880-1682 and analytical batch 880-1683 contained < Chloride> above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL) OR practical quantitation limit (PQL).

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01

Lab Sample ID: 890-439-1

Date Collected: 03/25/21 09:30

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 06:11	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 06:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	03/30/21 16:35	03/31/21 06:11	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/30/21 16:35	03/31/21 06:11	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 F2 F1	49.9	mg/Kg		03/30/21 10:54	03/31/21 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 11:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 11:31	1
Total TPH	<49.9	U F1	49.9	mg/Kg		03/30/21 10:54	03/31/21 11:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/30/21 10:54	03/31/21 11:31	1
o-Terphenyl	113		70 - 130	03/30/21 10:54	03/31/21 11:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1560	B F1	49.7	mg/Kg			04/13/21 01:46	10

Client Sample ID: BH01 A

Lab Sample ID: 890-439-2

Date Collected: 03/25/21 09:40

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
Total BTEX	<0.00201	U	0.00201	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/30/21 16:35	03/31/21 06:31	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:35	03/31/21 06:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/30/21 16:35	03/31/21 06:31	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/30/21 16:35	03/31/21 06:31	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01 A

Lab Sample ID: 890-439-2

Date Collected: 03/25/21 09:40

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 10

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		03/30/21 10:54	03/31/21 12:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 12:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 12:34	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	03/30/21 10:54	03/31/21 12:34	1
o-Terphenyl	118		70 - 130	03/30/21 10:54	03/31/21 12:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	914	B	4.96	mg/Kg			04/13/21 02:04	1

Client Sample ID: BH01B

Lab Sample ID: 890-439-3

Date Collected: 03/25/21 09:45

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 06:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 06:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	03/30/21 16:35	03/31/21 06:52	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/30/21 16:35	03/31/21 06:52	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		03/30/21 10:54	03/31/21 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 12:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 12:55	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:54	03/31/21 12:55	1
o-Terphenyl	112		70 - 130	03/30/21 10:54	03/31/21 12:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300	B	25.0	mg/Kg			04/13/21 02:10	5

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01C

Lab Sample ID: 890-439-4

Date Collected: 03/25/21 09:55

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/30/21 16:35	03/31/21 07:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 07:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	03/30/21 16:35	03/31/21 07:12	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/30/21 16:35	03/31/21 07:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/07/20 10:00	04/20/21 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/07/20 10:00	04/20/21 11:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/07/20 10:00	04/20/21 11:04	1
Total TPH	<50.0	U	50.0	mg/Kg		04/07/20 10:00	04/20/21 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	04/07/20 10:00	04/20/21 11:04	1
o-Terphenyl	128		70 - 130	04/07/20 10:00	04/20/21 11:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1480	B	25.0	mg/Kg			04/13/21 02:29	5

Client Sample ID: BH01D

Lab Sample ID: 890-439-5

Date Collected: 03/25/21 10:10

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 07:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	03/30/21 16:35	03/31/21 07:33	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/30/21 16:35	03/31/21 07:33	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01D

Lab Sample ID: 890-439-5

Date Collected: 03/25/21 10:10

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 25

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		03/30/21 10:54	03/31/21 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 13:37	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/30/21 10:54	03/31/21 13:37	1
o-Terphenyl	109		70 - 130	03/30/21 10:54	03/31/21 13:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1240	B	5.00	mg/Kg			04/13/21 02:35	1

Client Sample ID: BH01E

Lab Sample ID: 890-439-6

Date Collected: 03/25/21 10:35

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:35	03/31/21 07:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:35	03/31/21 07:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	03/30/21 16:35	03/31/21 07:53	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/30/21 16:35	03/31/21 07:53	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		03/30/21 10:54	03/31/21 13:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 13:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 13:58	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:54	03/31/21 13:58	1
o-Terphenyl	112		70 - 130	03/30/21 10:54	03/31/21 13:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070	B	5.00	mg/Kg			04/13/21 02:41	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01F

Lab Sample ID: 890-439-7

Date Collected: 03/25/21 11:10

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/30/21 16:35	03/31/21 08:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	03/30/21 16:35	03/31/21 08:14	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/30/21 16:35	03/31/21 08:14	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		03/30/21 10:54	03/31/21 14:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 14:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 14:19	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/30/21 10:54	03/31/21 14:19	1
o-Terphenyl	113		70 - 130	03/30/21 10:54	03/31/21 14:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	781	B	5.00	mg/Kg			04/13/21 02:47	1

Client Sample ID: BH01G

Lab Sample ID: 890-439-8

Date Collected: 03/25/21 12:00

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/30/21 16:35	03/31/21 08:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 08:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	03/30/21 16:35	03/31/21 08:34	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/30/21 16:35	03/31/21 08:34	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01G

Lab Sample ID: 890-439-8

Date Collected: 03/25/21 12:00

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 40

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		03/30/21 10:54	03/31/21 14:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 14:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 14:41	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/30/21 10:54	03/31/21 14:41	1
o-Terphenyl	113		70 - 130	03/30/21 10:54	03/31/21 14:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	162	B	5.01	mg/Kg			04/13/21 02:53	1

Client Sample ID: BH02

Lab Sample ID: 890-439-9

Date Collected: 03/25/21 13:10

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/30/21 16:35	03/31/21 08:54	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:35	03/31/21 08:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	03/30/21 16:35	03/31/21 08:54	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/30/21 16:35	03/31/21 08:54	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		03/30/21 10:54	03/31/21 15:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 15:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 15:02	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/30/21 10:54	03/31/21 15:02	1
o-Terphenyl	120		70 - 130	03/30/21 10:54	03/31/21 15:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19000	F1 B	250	mg/Kg			04/13/21 02:59	50

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02A

Lab Sample ID: 890-439-10

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/01/21 09:34	04/01/21 21:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	04/01/21 09:34	04/01/21 21:43	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/01/21 09:34	04/01/21 21:43	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		03/30/21 10:54	03/31/21 15:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 15:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 15:23	1
Total TPH	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:54	03/31/21 15:23	1
o-Terphenyl	112		70 - 130	03/30/21 10:54	03/31/21 15:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1420	B	25.2	mg/Kg			04/13/21 03:18	5

Client Sample ID: BH02B

Lab Sample ID: 890-439-11

Date Collected: 03/25/21 13:30

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
Total BTEX	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/30/21 16:17	03/31/21 08:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 08:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/30/21 16:17	03/31/21 08:09	1
1,4-Difluorobenzene (Surr)	108		70 - 130	03/30/21 16:17	03/31/21 08:09	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02B

Lab Sample ID: 890-439-11

Date Collected: 03/25/21 13:30

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 15

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		03/30/21 10:54	03/31/21 16:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 16:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 16:05	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/30/21 10:54	03/31/21 16:05	1
o-Terphenyl	118		70 - 130	03/30/21 10:54	03/31/21 16:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14000	B	100	mg/Kg			04/13/21 03:24	20

Client Sample ID: BH02C

Lab Sample ID: 890-439-12

Date Collected: 03/25/21 13:40

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 08:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 08:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/30/21 16:17	03/31/21 08:29	1
1,4-Difluorobenzene (Surr)	109		70 - 130	03/30/21 16:17	03/31/21 08:29	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		03/30/21 10:54	03/31/21 16:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:26	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/30/21 10:54	03/31/21 16:26	1
o-Terphenyl	119		70 - 130	03/30/21 10:54	03/31/21 16:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30000	B	249	mg/Kg			04/13/21 03:42	50

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02D

Lab Sample ID: 890-439-13

Date Collected: 03/25/21 13:50

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/30/21 16:17	03/31/21 08:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 08:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/30/21 16:17	03/31/21 08:50	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/30/21 16:17	03/31/21 08:50	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		03/30/21 10:54	03/31/21 16:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:48	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	03/30/21 10:54	03/31/21 16:48	1
o-Terphenyl	105		70 - 130	03/30/21 10:54	03/31/21 16:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23500	B	253	mg/Kg			04/13/21 03:48	50

Client Sample ID: BH02E

Lab Sample ID: 890-439-14

Date Collected: 03/25/21 14:15

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/30/21 16:17	03/31/21 09:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/30/21 16:17	03/31/21 09:11	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/30/21 16:17	03/31/21 09:11	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02E

Lab Sample ID: 890-439-14

Date Collected: 03/25/21 14:15

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		03/30/21 10:54	03/31/21 17:09	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		03/30/21 10:54	03/31/21 17:09	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		03/30/21 10:54	03/31/21 17:09	1
Total TPH	<50.1	U	50.1	mg/Kg		03/30/21 10:54	03/31/21 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/30/21 10:54	03/31/21 17:09	1
o-Terphenyl	115		70 - 130	03/30/21 10:54	03/31/21 17:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3780	B	25.3	mg/Kg			04/13/21 03:54	5

Client Sample ID: BH02F

Lab Sample ID: 890-439-15

Date Collected: 03/25/21 14:35

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/30/21 16:17	03/31/21 09:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	03/30/21 16:17	03/31/21 09:32	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/30/21 16:17	03/31/21 09:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 17:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 17:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 17:30	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:54	03/31/21 17:30	1
o-Terphenyl	113		70 - 130	03/30/21 10:54	03/31/21 17:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	581	B	4.99	mg/Kg			04/13/21 04:00	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02G

Lab Sample ID: 890-439-16

Date Collected: 03/25/21 15:20

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/30/21 16:17	03/31/21 09:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/30/21 16:17	03/31/21 09:52	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/30/21 16:17	03/31/21 09:52	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		03/30/21 10:54	03/31/21 17:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 17:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 17:51	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 10:54	03/31/21 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/30/21 10:54	03/31/21 17:51	1
o-Terphenyl	108		70 - 130	03/30/21 10:54	03/31/21 17:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	615	B	4.96	mg/Kg			04/13/21 04:06	1

Client Sample ID: BH02H

Lab Sample ID: 890-439-17

Date Collected: 03/25/21 15:50

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 10:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 10:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	03/30/21 16:17	03/31/21 10:13	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/30/21 16:17	03/31/21 10:13	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02H

Lab Sample ID: 890-439-17

Date Collected: 03/25/21 15:50

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 42

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		03/30/21 10:54	03/31/21 18:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:12	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130	03/30/21 10:54	03/31/21 18:12	1
o-Terphenyl	129		70 - 130	03/30/21 10:54	03/31/21 18:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	377	B	5.02	mg/Kg			04/13/21 04:13	1

Client Sample ID: BH03

Lab Sample ID: 890-439-18

Date Collected: 03/25/21 16:30

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
Total BTEX	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/30/21 16:17	03/31/21 10:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/30/21 16:17	03/31/21 10:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/30/21 16:17	03/31/21 10:34	1
1,4-Difluorobenzene (Surr)	118		70 - 130	03/30/21 16:17	03/31/21 10:34	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		03/30/21 10:54	03/31/21 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:33	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	03/30/21 10:54	03/31/21 18:33	1
o-Terphenyl	128		70 - 130	03/30/21 10:54	03/31/21 18:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3680	B	25.2	mg/Kg			04/13/21 04:19	5

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03A

Lab Sample ID: 890-439-19

Date Collected: 03/25/21 16:40

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/30/21 16:17	03/31/21 10:54	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 10:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	03/30/21 16:17	03/31/21 10:54	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/30/21 16:17	03/31/21 10:54	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		03/30/21 10:54	03/31/21 18:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:54	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	03/30/21 10:54	03/31/21 18:54	1
o-Terphenyl	125		70 - 130	03/30/21 10:54	03/31/21 18:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1420		4.95	mg/Kg			04/15/21 16:56	1

Client Sample ID: BH03B

Lab Sample ID: 890-439-20

Date Collected: 03/25/21 16:45

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/30/21 16:17	03/31/21 11:15	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/30/21 16:17	03/31/21 11:15	1
1,4-Difluorobenzene (Surr)	109		70 - 130	03/30/21 16:17	03/31/21 11:15	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03B

Lab Sample ID: 890-439-20

Date Collected: 03/25/21 16:45

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 15

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		03/30/21 10:54	03/31/21 19:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 19:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 19:15	1
Total TPH	<49.8	U	49.8	mg/Kg		03/30/21 10:54	03/31/21 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:54	03/31/21 19:15	1
o-Terphenyl	114		70 - 130	03/30/21 10:54	03/31/21 19:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2240		25.1	mg/Kg			04/15/21 17:01	5

Client Sample ID: BH03C

Lab Sample ID: 890-439-21

Date Collected: 03/25/21 17:00

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/30/21 16:17	03/31/21 12:39	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/30/21 16:17	03/31/21 12:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/30/21 16:17	03/31/21 12:39	1
1,4-Difluorobenzene (Surr)	118		70 - 130	03/30/21 16:17	03/31/21 12:39	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		03/30/21 11:13	03/30/21 21:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 21:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 21:50	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 11:13	03/30/21 21:50	1
o-Terphenyl	102		70 - 130	03/30/21 11:13	03/30/21 21:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1620	F1	25.1	mg/Kg			04/13/21 09:16	5

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03D

Lab Sample ID: 890-439-22

Date Collected: 03/25/21 17:15

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 13:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/30/21 16:17	03/31/21 13:00	1
1,4-Difluorobenzene (Surr)	110		70 - 130	03/30/21 16:17	03/31/21 13:00	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	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 22:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 22:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 22:54	1
Total TPH	<49.9	U	49.9	mg/Kg		03/30/21 11:13	03/30/21 22:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/30/21 11:13	03/30/21 22:54	1
o-Terphenyl	109		70 - 130	03/30/21 11:13	03/30/21 22:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1720		25.2	mg/Kg			04/13/21 09:34	5

Client Sample ID: BH03E

Lab Sample ID: 890-439-23

Date Collected: 03/25/21 17:20

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		03/30/21 16:17	03/31/21 13:20	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/30/21 16:17	03/31/21 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/30/21 16:17	03/31/21 13:20	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/30/21 16:17	03/31/21 13:20	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03E

Lab Sample ID: 890-439-23

Date Collected: 03/25/21 17:20

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 30

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		03/30/21 11:13	03/30/21 23:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:16	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/30/21 11:13	03/30/21 23:16	1
o-Terphenyl	111		70 - 130	03/30/21 11:13	03/30/21 23:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	666		5.05	mg/Kg			04/13/21 09:40	1

Client Sample ID: BH03F

Lab Sample ID: 890-439-24

Date Collected: 03/25/21 17:30

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 13:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/30/21 16:17	03/31/21 13:41	1
1,4-Difluorobenzene (Surr)	112		70 - 130	03/30/21 16:17	03/31/21 13:41	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	<50.1	U	50.1	mg/Kg		03/30/21 11:13	03/30/21 23:37	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		03/30/21 11:13	03/30/21 23:37	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		03/30/21 11:13	03/30/21 23:37	1
Total TPH	<50.1	U	50.1	mg/Kg		03/30/21 11:13	03/30/21 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 11:13	03/30/21 23:37	1
o-Terphenyl	111		70 - 130	03/30/21 11:13	03/30/21 23:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	715		5.04	mg/Kg			04/13/21 09:46	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03G

Lab Sample ID: 890-439-25

Date Collected: 03/25/21 18:45

Matrix: Solid

Date Received: 03/26/21 11:30

Sample Depth: - 40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/30/21 16:17	03/31/21 14:02	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/30/21 16:17	03/31/21 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	03/30/21 16:17	03/31/21 14:02	1
1,4-Difluorobenzene (Surr)	99		70 - 130	03/30/21 16:17	03/31/21 14:02	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		03/30/21 11:13	03/30/21 23:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:58	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/30/21 11:13	03/30/21 23:58	1
o-Terphenyl	108		70 - 130	03/30/21 11:13	03/30/21 23:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	324		5.03	mg/Kg			04/13/21 09:52	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-439-1	BH01	113	102
890-439-2	BH01 A	108	102
890-439-3	BH01B	112	102
890-439-4	BH01C	113	105
890-439-5	BH01D	118	103
890-439-6	BH01E	116	102
890-439-7	BH01F	114	103
890-439-8	BH01G	112	105
890-439-9	BH02	109	104
890-439-10	BH02A	120	106
890-439-11	BH02B	96	108
890-439-12	BH02C	99	109
890-439-13	BH02D	98	107
890-439-14	BH02E	94	105
890-439-15	BH02F	93	100
890-439-16	BH02G	95	107
890-439-17	BH02H	106	98
890-439-18	BH03	105	118
890-439-19	BH03A	93	104
890-439-20	BH03B	103	109
890-439-21	BH03C	98	118
890-439-22	BH03D	95	110
890-439-23	BH03E	94	107
890-439-24	BH03F	95	112
890-439-25	BH03G	111	99
LCS 880-1052/1-A	Lab Control Sample	97	206 S1+
LCS 880-1079/1-A	Lab Control Sample	101	103
LCS 880-1081/1-A	Lab Control Sample	105	103
LCS 880-1146/1-A	Lab Control Sample	101	104
LCSD 880-1052/2-A	Lab Control Sample Dup	99	103
LCSD 880-1079/2-A	Lab Control Sample Dup	86	98
LCSD 880-1081/2-A	Lab Control Sample Dup	100	101
LCSD 880-1146/2-A	Lab Control Sample Dup	107	103
MB 880-1052/5-A	Method Blank	100	101
MB 880-1075/5-A	Method Blank	121	107
MB 880-1079/5-A	Method Blank	115	90
MB 880-1081/5-A	Method Blank	103	100
MB 880-1146/5-A	Method Blank	105	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-439-11 MS	BH02B		

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID		
890-439-11 MSD	BH02B		
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-439-1	BH01	99	113
890-439-1 MS	BH01	106	111
890-439-1 MSD	BH01	118	117
890-439-2	BH01 A	105	118
890-439-3	BH01B	100	112
890-439-4	BH01C	116	128
890-439-5	BH01D	96	109
890-439-6	BH01E	100	112
890-439-7	BH01F	101	113
890-439-8	BH01G	99	113
890-439-9	BH02	104	120
890-439-10	BH02A	100	112
890-439-11	BH02B	104	118
890-439-12	BH02C	103	119
890-439-13	BH02D	94	105
890-439-14	BH02E	101	115
890-439-15	BH02F	100	113
890-439-16	BH02G	96	108
890-439-17	BH02H	123	129
890-439-18	BH03	112	128
890-439-19	BH03A	109	125
890-439-20	BH03B	100	114
890-439-21	BH03C	98	102
890-439-21 MS	BH03C	96	96
890-439-21 MSD	BH03C	93	95
890-439-22	BH03D	99	109
890-439-23	BH03E	97	111
890-439-24	BH03F	98	111
890-439-25	BH03G	95	108
LCS 880-1059/2-A	Lab Control Sample	118	117
LCS 880-1065/2-A	Lab Control Sample	99	100
LCS 880-1998/2-A	Lab Control Sample	123	115
LCSD 880-1059/3-A	Lab Control Sample Dup	105	113
LCSD 880-1065/3-A	Lab Control Sample Dup	100	108
LCSD 880-1998/3-A	Lab Control Sample Dup	121	107
MB 880-1059/1-A	Method Blank	95	106
MB 880-1065/1-A	Method Blank	109	116
MB 880-1998/1-A	Method Blank	113	111

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1052/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1052

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/30/21 09:18	03/30/21 13:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/30/21 09:18	03/30/21 13:44	1

Lab Sample ID: LCS 880-1052/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07624		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.07393		mg/Kg		74	70 - 130
Toluene	0.100	0.07294		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	0.200	0.1479		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07621		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	206	S1+	70 - 130

Lab Sample ID: LCSD 880-1052/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08614		mg/Kg		86	70 - 130	12	35
Ethylbenzene	0.100	0.08574		mg/Kg		86	70 - 130	15	35
Toluene	0.100	0.08256		mg/Kg		83	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1714		mg/Kg		86	70 - 130	15	35
o-Xylene	0.100	0.08727		mg/Kg		87	70 - 130	14	35

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

Lab Sample ID: MB 880-1075/5-A

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1075

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 15:36	03/30/21 20:44	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: MB 880-1075/5-A

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1075

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 15:36	03/30/21 20:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 15:36	03/30/21 20:44	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 15:36	03/30/21 20:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 15:36	03/30/21 20:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 15:36	03/30/21 20:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 15:36	03/30/21 20:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	03/30/21 15:36	03/30/21 20:44	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/30/21 15:36	03/30/21 20:44	1

Lab Sample ID: MB 880-1079/5-A

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1079

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:17	03/31/21 07:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:17	03/31/21 07:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	03/30/21 16:17	03/31/21 07:47	1
1,4-Difluorobenzene (Surr)	90		70 - 130	03/30/21 16:17	03/31/21 07:47	1

Lab Sample ID: LCS 880-1079/1-A

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1159		mg/Kg		116	70 - 130
Ethylbenzene	0.100	0.1135		mg/Kg		114	70 - 130
Toluene	0.100	0.1216		mg/Kg		122	70 - 130
m-Xylene & p-Xylene	0.200	0.2257		mg/Kg		113	70 - 130
o-Xylene	0.100	0.1116		mg/Kg		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: LCSD 880-1079/2-A

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1079

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09952		mg/Kg		100	70 - 130	15	35
Ethylbenzene	0.100	0.09468		mg/Kg		95	70 - 130	18	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.1866		mg/Kg		93	70 - 130	19	35
o-Xylene	0.100	0.09076		mg/Kg		91	70 - 130	21	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-439-11 MS

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: BH02B

Prep Type: Total/NA

Prep Batch: 1079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.101	0.07829		mg/Kg					
Ethylbenzene	<0.00201	U	0.101	0.07823		mg/Kg					
Toluene	<0.00201	U	0.101	0.08142		mg/Kg					
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1523		mg/Kg					
o-Xylene	<0.00201	U	0.101	0.07342		mg/Kg					

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 890-439-11 MSD

Matrix: Solid

Analysis Batch: 1080

Client Sample ID: BH02B

Prep Type: Total/NA

Prep Batch: 1079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.101	0.08270		mg/Kg					
Ethylbenzene	<0.00201	U	0.101	0.08319		mg/Kg					
Toluene	<0.00201	U	0.101	0.08886		mg/Kg					
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1667		mg/Kg					
o-Xylene	<0.00201	U	0.101	0.08158		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: MB 880-1081/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1081

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: MB 880-1081/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1081

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/30/21 16:35	03/31/21 01:03	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/30/21 16:35	03/31/21 01:03	1

Lab Sample ID: LCS 880-1081/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09510		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09514		mg/Kg		95	70 - 130
Toluene	0.100	0.09054		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09415		mg/Kg		94	70 - 130

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

Lab Sample ID: LCSD 880-1081/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08885		mg/Kg		89	70 - 130	7	35
Ethylbenzene	0.100	0.08844		mg/Kg		88	70 - 130	7	35
Toluene	0.100	0.08513		mg/Kg		85	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1745		mg/Kg		87	70 - 130	8	35
o-Xylene	0.100	0.08637		mg/Kg		86	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-1146/5-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1146

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 13:09	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: MB 880-1146/5-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1146

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/01/21 09:34	04/01/21 13:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/01/21 09:34	04/01/21 13:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/01/21 09:34	04/01/21 13:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/01/21 09:34	04/01/21 13:09	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/01/21 09:34	04/01/21 13:09	1

Lab Sample ID: LCS 880-1146/1-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08719		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08356		mg/Kg		84	70 - 130
Toluene	0.100	0.08099		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.200	0.1689		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08691		mg/Kg		87	70 - 130

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

Lab Sample ID: LCSD 880-1146/2-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1146

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08839		mg/Kg		88	70 - 130	1	35
Ethylbenzene	0.100	0.08663		mg/Kg		87	70 - 130	4	35
Toluene	0.100	0.08269		mg/Kg		83	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1754		mg/Kg		88	70 - 130	4	35
o-Xylene	0.100	0.09110		mg/Kg		91	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-1059/1-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1059

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		03/30/21 10:54	03/31/21 10:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 10:27	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: MB 880-1059/1-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1059

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 10:27	1
Total TPH	<50.0	U	50.0	mg/Kg		03/30/21 10:54	03/31/21 10:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/30/21 10:54	03/31/21 10:27	1
o-Terphenyl	106		70 - 130	03/30/21 10:54	03/31/21 10:27	1

Lab Sample ID: LCS 880-1059/2-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1244		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1082		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-1059/3-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1069		mg/Kg		107	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-439-1 MS

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 1059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2 F1	1000	1149		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1098		mg/Kg		110	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	111		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: 890-439-1 MSD

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 1059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2 F1	998	1456	F1 F2	mg/Kg		142	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1198		mg/Kg		120	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	117		70 - 130								

Lab Sample ID: MB 880-1065/1-A

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1065

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1196		50.0	mg/Kg		03/30/21 11:13	03/30/21 20:46	1
Diesel Range Organics (Over C10-C28)	1130		50.0	mg/Kg		03/30/21 11:13	03/30/21 20:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/21 11:13	03/30/21 20:46	1
Total TPH	2326		50.0	mg/Kg		03/30/21 11:13	03/30/21 20:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			03/30/21 11:13	03/30/21 20:46	1
o-Terphenyl	116		70 - 130			03/30/21 11:13	03/30/21 20:46	1

Lab Sample ID: LCS 880-1065/2-A

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	995.8		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	926.0		mg/Kg		93	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	100		70 - 130						

Lab Sample ID: LCSD 880-1065/3-A

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1065

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	980.5		mg/Kg		98	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	983.9		mg/Kg		98	70 - 130	6	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: LCSD 880-1065/3-A

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1065

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 890-439-21 MS

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: BH03C

Prep Type: Total/NA

Prep Batch: 1065

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1174		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1001		mg/Kg		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 890-439-21 MSD

Matrix: Solid

Analysis Batch: 1054

Client Sample ID: BH03C

Prep Type: Total/NA

Prep Batch: 1065

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1138		mg/Kg		112	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	985.4		mg/Kg		99	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: MB 880-1998/1-A

Matrix: Solid

Analysis Batch: 1967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1998

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/19/21 14:03	04/20/21 07:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/21 14:03	04/20/21 07:51	1
Oil Range Organics (Over C28-C36)	104.0		50.0	mg/Kg		04/19/21 14:03	04/20/21 07:51	1
Total TPH	104.0		50.0	mg/Kg		04/19/21 14:03	04/20/21 07:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	04/19/21 14:03	04/20/21 07:51	1
o-Terphenyl	111		70 - 130	04/19/21 14:03	04/20/21 07:51	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Lab Sample ID: LCS 880-1998/2-A

Matrix: Solid

Analysis Batch: 1967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1998

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1142		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1057		mg/Kg		106	70 - 130		
	</										

Lab Sample ID: LCSD 880-1998/3-A

Matrix: Solid

Analysis Batch: 1967

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1998

Top Bottom											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1177		mg/Kg		118	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	958.0		mg/Kg		96	70 - 130	10	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane	121		70 - 130								
o-Terphenyl	107		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1060/1-A

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/02/21 12:53	1

Lab Sample ID: LCS 880-1060/2-A

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	237.0		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-1060/3-A

Matrix: Solid

Analysis Batch: 1240

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	236.5		mg/Kg		95	90 - 110	0	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-1058/1-A

Matrix: Solid

Analysis Batch: 1307

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/04/21 14:59	1

Lab Sample ID: LCS 880-1058/2-A

Matrix: Solid

Analysis Batch: 1307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.9		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-1058/3-A

Matrix: Solid

Analysis Batch: 1307

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	248.2		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-439-9 MS

Matrix: Solid

Analysis Batch: 1307

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	27000		250	38360	4	mg/Kg		4559	90 - 110

Lab Sample ID: 890-439-9 MSD

Matrix: Solid

Analysis Batch: 1307

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	27000		250	38320	4	mg/Kg		4543	90 - 110	0	20

Lab Sample ID: MB 880-1315/1-A

Matrix: Solid

Analysis Batch: 1330

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/05/21 15:58	1

Lab Sample ID: LCS 880-1315/2-A

Matrix: Solid

Analysis Batch: 1330

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	272.5		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-1315/3-A

Matrix: Solid

Analysis Batch: 1330

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	273.9		mg/Kg		110	90 - 110	1	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1682/1-A

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.22		5.00	mg/Kg			04/12/21 20:52	1

Lab Sample ID: LCS 880-1682/2-A

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	248.2		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-1682/3-A

Matrix: Solid

Analysis Batch: 1683

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	227.0		mg/Kg		91	90 - 110	9	20

Lab Sample ID: 890-439-1 MS

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1560	B F1	2490	3734	F1	mg/Kg		87	90 - 110

Lab Sample ID: 890-439-1 MSD

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1560	B F1	2490	3982		mg/Kg		97	90 - 110	6	20

Lab Sample ID: 890-439-9 MS

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19000	F1 B	12500	31360		mg/Kg		99	90 - 110

Lab Sample ID: 890-439-9 MSD

Matrix: Solid

Analysis Batch: 1683

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19000	F1 B	12500	33390	F1	mg/Kg		116	90 - 110	6	20

Lab Sample ID: MB 880-1686/1-A

Matrix: Solid

Analysis Batch: 1687

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/13/21 04:49	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-1686/2-A

Matrix: Solid

Analysis Batch: 1687

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	234.6		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-1686/3-A

Matrix: Solid

Analysis Batch: 1687

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	230.1		mg/Kg		92	90 - 110	2	20

Lab Sample ID: 890-439-21 MS

Matrix: Solid

Analysis Batch: 1687

Client Sample ID: BH03C

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1620	F1	1250	3035	F1	mg/Kg		113	90 - 110

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

GC VOA

Prep Batch: 1052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1052/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Total/NA	Solid	8021B	1081
890-439-2	BH01 A	Total/NA	Solid	8021B	1081
890-439-3	BH01B	Total/NA	Solid	8021B	1081
890-439-4	BH01C	Total/NA	Solid	8021B	1081
890-439-5	BH01D	Total/NA	Solid	8021B	1081
890-439-6	BH01E	Total/NA	Solid	8021B	1081
890-439-7	BH01F	Total/NA	Solid	8021B	1081
890-439-8	BH01G	Total/NA	Solid	8021B	1081
890-439-9	BH02	Total/NA	Solid	8021B	1081
MB 880-1052/5-A	Method Blank	Total/NA	Solid	8021B	1052
MB 880-1081/5-A	Method Blank	Total/NA	Solid	8021B	1081
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	8021B	1052
LCS 880-1081/1-A	Lab Control Sample	Total/NA	Solid	8021B	1081
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1052
LCSD 880-1081/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1081

Prep Batch: 1075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1075/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 1079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-11	BH02B	Total/NA	Solid	5035	
890-439-12	BH02C	Total/NA	Solid	5035	
890-439-13	BH02D	Total/NA	Solid	5035	
890-439-14	BH02E	Total/NA	Solid	5035	
890-439-15	BH02F	Total/NA	Solid	5035	
890-439-16	BH02G	Total/NA	Solid	5035	
890-439-17	BH02H	Total/NA	Solid	5035	
890-439-18	BH03	Total/NA	Solid	5035	
890-439-19	BH03A	Total/NA	Solid	5035	
890-439-20	BH03B	Total/NA	Solid	5035	
890-439-21	BH03C	Total/NA	Solid	5035	
890-439-22	BH03D	Total/NA	Solid	5035	
890-439-23	BH03E	Total/NA	Solid	5035	
890-439-24	BH03F	Total/NA	Solid	5035	
890-439-25	BH03G	Total/NA	Solid	5035	
MB 880-1079/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1079/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1079/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-439-11 MS	BH02B	Total/NA	Solid	5035	
890-439-11 MSD	BH02B	Total/NA	Solid	5035	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

GC VOA

Analysis Batch: 1080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-11	BH02B	Total/NA	Solid	8021B	1079
890-439-12	BH02C	Total/NA	Solid	8021B	1079
890-439-13	BH02D	Total/NA	Solid	8021B	1079
890-439-14	BH02E	Total/NA	Solid	8021B	1079
890-439-15	BH02F	Total/NA	Solid	8021B	1079
890-439-16	BH02G	Total/NA	Solid	8021B	1079
890-439-17	BH02H	Total/NA	Solid	8021B	1079
890-439-18	BH03	Total/NA	Solid	8021B	1079
890-439-19	BH03A	Total/NA	Solid	8021B	1079
890-439-20	BH03B	Total/NA	Solid	8021B	1079
890-439-21	BH03C	Total/NA	Solid	8021B	1079
890-439-22	BH03D	Total/NA	Solid	8021B	1079
890-439-23	BH03E	Total/NA	Solid	8021B	1079
890-439-24	BH03F	Total/NA	Solid	8021B	1079
890-439-25	BH03G	Total/NA	Solid	8021B	1079
MB 880-1075/5-A	Method Blank	Total/NA	Solid	8021B	1075
MB 880-1079/5-A	Method Blank	Total/NA	Solid	8021B	1079
LCS 880-1079/1-A	Lab Control Sample	Total/NA	Solid	8021B	1079
LCSD 880-1079/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1079
890-439-11 MS	BH02B	Total/NA	Solid	8021B	1079
890-439-11 MSD	BH02B	Total/NA	Solid	8021B	1079

Prep Batch: 1081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Total/NA	Solid	5035	
890-439-2	BH01 A	Total/NA	Solid	5035	
890-439-3	BH01B	Total/NA	Solid	5035	
890-439-4	BH01C	Total/NA	Solid	5035	
890-439-5	BH01D	Total/NA	Solid	5035	
890-439-6	BH01E	Total/NA	Solid	5035	
890-439-7	BH01F	Total/NA	Solid	5035	
890-439-8	BH01G	Total/NA	Solid	5035	
890-439-9	BH02	Total/NA	Solid	5035	
MB 880-1081/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1081/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1081/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 1146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-10	BH02A	Total/NA	Solid	5035	
MB 880-1146/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1146/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1146/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-10	BH02A	Total/NA	Solid	8021B	1146
MB 880-1146/5-A	Method Blank	Total/NA	Solid	8021B	1146
LCS 880-1146/1-A	Lab Control Sample	Total/NA	Solid	8021B	1146
LCSD 880-1146/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1146

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

GC Semi VOA

Analysis Batch: 1054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Total/NA	Solid	8015B NM	1065
890-439-22	BH03D	Total/NA	Solid	8015B NM	1065
890-439-23	BH03E	Total/NA	Solid	8015B NM	1065
890-439-24	BH03F	Total/NA	Solid	8015B NM	1065
890-439-25	BH03G	Total/NA	Solid	8015B NM	1065
MB 880-1065/1-A	Method Blank	Total/NA	Solid	8015B NM	1065
LCS 880-1065/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1065
LCSD 880-1065/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1065
890-439-21 MS	BH03C	Total/NA	Solid	8015B NM	1065
890-439-21 MSD	BH03C	Total/NA	Solid	8015B NM	1065

Prep Batch: 1059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Total/NA	Solid	8015NM Prep	
890-439-2	BH01 A	Total/NA	Solid	8015NM Prep	
890-439-3	BH01B	Total/NA	Solid	8015NM Prep	
890-439-5	BH01D	Total/NA	Solid	8015NM Prep	
890-439-6	BH01E	Total/NA	Solid	8015NM Prep	
890-439-7	BH01F	Total/NA	Solid	8015NM Prep	
890-439-8	BH01G	Total/NA	Solid	8015NM Prep	
890-439-9	BH02	Total/NA	Solid	8015NM Prep	
890-439-10	BH02A	Total/NA	Solid	8015NM Prep	
890-439-11	BH02B	Total/NA	Solid	8015NM Prep	
890-439-12	BH02C	Total/NA	Solid	8015NM Prep	
890-439-13	BH02D	Total/NA	Solid	8015NM Prep	
890-439-14	BH02E	Total/NA	Solid	8015NM Prep	
890-439-15	BH02F	Total/NA	Solid	8015NM Prep	
890-439-16	BH02G	Total/NA	Solid	8015NM Prep	
890-439-17	BH02H	Total/NA	Solid	8015NM Prep	
890-439-18	BH03	Total/NA	Solid	8015NM Prep	
890-439-19	BH03A	Total/NA	Solid	8015NM Prep	
890-439-20	BH03B	Total/NA	Solid	8015NM Prep	
MB 880-1059/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1059/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-439-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-439-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Prep Batch: 1065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Total/NA	Solid	8015NM Prep	
890-439-22	BH03D	Total/NA	Solid	8015NM Prep	
890-439-23	BH03E	Total/NA	Solid	8015NM Prep	
890-439-24	BH03F	Total/NA	Solid	8015NM Prep	
890-439-25	BH03G	Total/NA	Solid	8015NM Prep	
MB 880-1065/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1065/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1065/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-439-21 MS	BH03C	Total/NA	Solid	8015NM Prep	
890-439-21 MSD	BH03C	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

GC Semi VOA

Analysis Batch: 1088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Total/NA	Solid	8015B NM	1059
890-439-2	BH01 A	Total/NA	Solid	8015B NM	1059
890-439-3	BH01B	Total/NA	Solid	8015B NM	1059
890-439-5	BH01D	Total/NA	Solid	8015B NM	1059
890-439-6	BH01E	Total/NA	Solid	8015B NM	1059
890-439-7	BH01F	Total/NA	Solid	8015B NM	1059
890-439-8	BH01G	Total/NA	Solid	8015B NM	1059
890-439-9	BH02	Total/NA	Solid	8015B NM	1059
890-439-10	BH02A	Total/NA	Solid	8015B NM	1059
890-439-11	BH02B	Total/NA	Solid	8015B NM	1059
890-439-12	BH02C	Total/NA	Solid	8015B NM	1059
890-439-13	BH02D	Total/NA	Solid	8015B NM	1059
890-439-14	BH02E	Total/NA	Solid	8015B NM	1059
890-439-15	BH02F	Total/NA	Solid	8015B NM	1059
890-439-16	BH02G	Total/NA	Solid	8015B NM	1059
890-439-17	BH02H	Total/NA	Solid	8015B NM	1059
890-439-18	BH03	Total/NA	Solid	8015B NM	1059
890-439-19	BH03A	Total/NA	Solid	8015B NM	1059
890-439-20	BH03B	Total/NA	Solid	8015B NM	1059
MB 880-1059/1-A	Method Blank	Total/NA	Solid	8015B NM	1059
LCS 880-1059/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1059
LCSD 880-1059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1059
890-439-1 MS	BH01	Total/NA	Solid	8015B NM	1059
890-439-1 MSD	BH01	Total/NA	Solid	8015B NM	1059

Analysis Batch: 1967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-4	BH01C	Total/NA	Solid	8015B NM	1998
MB 880-1998/1-A	Method Blank	Total/NA	Solid	8015B NM	1998
LCS 880-1998/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1998
LCSD 880-1998/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1998

Prep Batch: 1998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-4	BH01C	Total/NA	Solid	8015NM Prep	
MB 880-1998/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1998/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1998/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Soluble	Solid	DI Leach	
890-439-2	BH01 A	Soluble	Solid	DI Leach	
890-439-3	BH01B	Soluble	Solid	DI Leach	
890-439-4	BH01C	Soluble	Solid	DI Leach	
890-439-5	BH01D	Soluble	Solid	DI Leach	
890-439-6	BH01E	Soluble	Solid	DI Leach	
890-439-7	BH01F	Soluble	Solid	DI Leach	
890-439-8	BH01G	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

HPLC/IC (Continued)

Leach Batch: 1058 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-9	BH02	Soluble	Solid	DI Leach	
890-439-10	BH02A	Soluble	Solid	DI Leach	
890-439-11	BH02B	Soluble	Solid	DI Leach	
890-439-12	BH02C	Soluble	Solid	DI Leach	
890-439-13	BH02D	Soluble	Solid	DI Leach	
890-439-14	BH02E	Soluble	Solid	DI Leach	
890-439-15	BH02F	Soluble	Solid	DI Leach	
890-439-16	BH02G	Soluble	Solid	DI Leach	
890-439-17	BH02H	Soluble	Solid	DI Leach	
890-439-18	BH03	Soluble	Solid	DI Leach	
MB 880-1058/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1058/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1058/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-439-9 MS	BH02	Soluble	Solid	DI Leach	
890-439-9 MSD	BH02	Soluble	Solid	DI Leach	

Leach Batch: 1060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-19	BH03A	Soluble	Solid	DI Leach	
890-439-20	BH03B	Soluble	Solid	DI Leach	
MB 880-1060/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1060/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1060/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-19	BH03A	Soluble	Solid	300.0	1060
890-439-20	BH03B	Soluble	Solid	300.0	1060
MB 880-1060/1-A	Method Blank	Soluble	Solid	300.0	1060
LCS 880-1060/2-A	Lab Control Sample	Soluble	Solid	300.0	1060
LCSD 880-1060/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1060

Analysis Batch: 1307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Soluble	Solid	300.0	1058
890-439-2	BH01 A	Soluble	Solid	300.0	1058
890-439-3	BH01B	Soluble	Solid	300.0	1058
890-439-4	BH01C	Soluble	Solid	300.0	1058
890-439-5	BH01D	Soluble	Solid	300.0	1058
890-439-6	BH01E	Soluble	Solid	300.0	1058
890-439-7	BH01F	Soluble	Solid	300.0	1058
890-439-8	BH01G	Soluble	Solid	300.0	1058
890-439-9	BH02	Soluble	Solid	300.0	1058
890-439-10	BH02A	Soluble	Solid	300.0	1058
890-439-11	BH02B	Soluble	Solid	300.0	1058
890-439-12	BH02C	Soluble	Solid	300.0	1058
890-439-13	BH02D	Soluble	Solid	300.0	1058
890-439-14	BH02E	Soluble	Solid	300.0	1058
890-439-15	BH02F	Soluble	Solid	300.0	1058
890-439-16	BH02G	Soluble	Solid	300.0	1058
890-439-17	BH02H	Soluble	Solid	300.0	1058

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

HPLC/IC (Continued)

Analysis Batch: 1307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-18	BH03	Soluble	Solid	300.0	1058
MB 880-1058/1-A	Method Blank	Soluble	Solid	300.0	1058
LCS 880-1058/2-A	Lab Control Sample	Soluble	Solid	300.0	1058
LCSD 880-1058/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1058
890-439-9 MS	BH02	Soluble	Solid	300.0	1058
890-439-9 MSD	BH02	Soluble	Solid	300.0	1058

Leach Batch: 1315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Soluble	Solid	DI Leach	
890-439-22	BH03D	Soluble	Solid	DI Leach	
890-439-23	BH03E	Soluble	Solid	DI Leach	
890-439-24	BH03F	Soluble	Solid	DI Leach	
890-439-25	BH03G	Soluble	Solid	DI Leach	
MB 880-1315/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1315/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1315/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Soluble	Solid	300.0	1315
890-439-22	BH03D	Soluble	Solid	300.0	1315
890-439-23	BH03E	Soluble	Solid	300.0	1315
890-439-24	BH03F	Soluble	Solid	300.0	1315
890-439-25	BH03G	Soluble	Solid	300.0	1315
MB 880-1315/1-A	Method Blank	Soluble	Solid	300.0	1315
LCS 880-1315/2-A	Lab Control Sample	Soluble	Solid	300.0	1315
LCSD 880-1315/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1315

Leach Batch: 1682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Soluble	Solid	DI Leach	
890-439-2	BH01 A	Soluble	Solid	DI Leach	
890-439-3	BH01B	Soluble	Solid	DI Leach	
890-439-4	BH01C	Soluble	Solid	DI Leach	
890-439-5	BH01D	Soluble	Solid	DI Leach	
890-439-6	BH01E	Soluble	Solid	DI Leach	
890-439-7	BH01F	Soluble	Solid	DI Leach	
890-439-8	BH01G	Soluble	Solid	DI Leach	
890-439-9	BH02	Soluble	Solid	DI Leach	
890-439-10	BH02A	Soluble	Solid	DI Leach	
890-439-11	BH02B	Soluble	Solid	DI Leach	
890-439-12	BH02C	Soluble	Solid	DI Leach	
890-439-13	BH02D	Soluble	Solid	DI Leach	
890-439-14	BH02E	Soluble	Solid	DI Leach	
890-439-15	BH02F	Soluble	Solid	DI Leach	
890-439-16	BH02G	Soluble	Solid	DI Leach	
890-439-17	BH02H	Soluble	Solid	DI Leach	
890-439-18	BH03	Soluble	Solid	DI Leach	
MB 880-1682/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1682/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

HPLC/IC (Continued)

Leach Batch: 1682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-1682/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-439-1 MS	BH01	Soluble	Solid	DI Leach	
890-439-1 MSD	BH01	Soluble	Solid	DI Leach	
890-439-9 MS	BH02	Soluble	Solid	DI Leach	
890-439-9 MSD	BH02	Soluble	Solid	DI Leach	

Analysis Batch: 1683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-1	BH01	Soluble	Solid	300.0	1682
890-439-2	BH01 A	Soluble	Solid	300.0	1682
890-439-3	BH01B	Soluble	Solid	300.0	1682
890-439-4	BH01C	Soluble	Solid	300.0	1682
890-439-5	BH01D	Soluble	Solid	300.0	1682
890-439-6	BH01E	Soluble	Solid	300.0	1682
890-439-7	BH01F	Soluble	Solid	300.0	1682
890-439-8	BH01G	Soluble	Solid	300.0	1682
890-439-9	BH02	Soluble	Solid	300.0	1682
890-439-10	BH02A	Soluble	Solid	300.0	1682
890-439-11	BH02B	Soluble	Solid	300.0	1682
890-439-12	BH02C	Soluble	Solid	300.0	1682
890-439-13	BH02D	Soluble	Solid	300.0	1682
890-439-14	BH02E	Soluble	Solid	300.0	1682
890-439-15	BH02F	Soluble	Solid	300.0	1682
890-439-16	BH02G	Soluble	Solid	300.0	1682
890-439-17	BH02H	Soluble	Solid	300.0	1682
890-439-18	BH03	Soluble	Solid	300.0	1682
MB 880-1682/1-A	Method Blank	Soluble	Solid	300.0	1682
LCS 880-1682/2-A	Lab Control Sample	Soluble	Solid	300.0	1682
LCSD 880-1682/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1682
890-439-1 MS	BH01	Soluble	Solid	300.0	1682
890-439-1 MSD	BH01	Soluble	Solid	300.0	1682
890-439-9 MS	BH02	Soluble	Solid	300.0	1682
890-439-9 MSD	BH02	Soluble	Solid	300.0	1682

Leach Batch: 1686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Soluble	Solid	DI Leach	
890-439-22	BH03D	Soluble	Solid	DI Leach	
890-439-23	BH03E	Soluble	Solid	DI Leach	
890-439-24	BH03F	Soluble	Solid	DI Leach	
890-439-25	BH03G	Soluble	Solid	DI Leach	
MB 880-1686/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1686/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1686/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-439-21 MS	BH03C	Soluble	Solid	DI Leach	
890-439-21 MSD	BH03C	Soluble	Solid	DI Leach	

Analysis Batch: 1687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-21	BH03C	Soluble	Solid	300.0	1686
890-439-22	BH03D	Soluble	Solid	300.0	1686

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

HPLC/IC (Continued)

Analysis Batch: 1687 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-23	BH03E	Soluble	Solid	300.0	1686
890-439-24	BH03F	Soluble	Solid	300.0	1686
890-439-25	BH03G	Soluble	Solid	300.0	1686
MB 880-1686/1-A	Method Blank	Soluble	Solid	300.0	1686
LCS 880-1686/2-A	Lab Control Sample	Soluble	Solid	300.0	1686
LCSD 880-1686/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1686
890-439-21 MS	BH03C	Soluble	Solid	300.0	1686
890-439-21 MSD	BH03C	Soluble	Solid	300.0	1686

Analysis Batch: 1837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-439-19	BH03A	Soluble	Solid	300.0	1060
890-439-20	BH03B	Soluble	Solid	300.0	1060

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01

Lab Sample ID: 890-439-1

Date Collected: 03/25/21 09:30

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 06:11	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 11:31	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		10	1307	04/04/21 15:34	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		10	1683	04/13/21 01:46	CH	XM

Client Sample ID: BH01 A

Lab Sample ID: 890-439-2

Date Collected: 03/25/21 09:40

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 06:31	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 12:34	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 15:39	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 02:04	CH	XM

Client Sample ID: BH01B

Lab Sample ID: 890-439-3

Date Collected: 03/25/21 09:45

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 06:52	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 12:55	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		5	1307	04/04/21 15:44	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		5	1683	04/13/21 02:10	CH	XM

Client Sample ID: BH01C

Lab Sample ID: 890-439-4

Date Collected: 03/25/21 09:55

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 07:12	KL	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01C

Lab Sample ID: 890-439-4

Date Collected: 03/25/21 09:55

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1998	04/07/20 10:00	DM	XM
Total/NA	Analysis	8015B NM		1	1967	04/20/21 11:04	AJ	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		5	1307	04/04/21 15:58	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		5	1683	04/13/21 02:29	CH	XM

Client Sample ID: BH01D

Lab Sample ID: 890-439-5

Date Collected: 03/25/21 10:10

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 07:33	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 13:37	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 16:03	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 02:35	CH	XM

Client Sample ID: BH01E

Lab Sample ID: 890-439-6

Date Collected: 03/25/21 10:35

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 07:53	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 13:58	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 16:08	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 02:41	CH	XM

Client Sample ID: BH01F

Lab Sample ID: 890-439-7

Date Collected: 03/25/21 11:10

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 08:14	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 14:19	T1S	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH01F

Lab Sample ID: 890-439-7

Date Collected: 03/25/21 11:10

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 16:13	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 02:47	CH	XM

Client Sample ID: BH01G

Lab Sample ID: 890-439-8

Date Collected: 03/25/21 12:00

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 08:34	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 14:41	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 16:18	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 02:53	CH	XM

Client Sample ID: BH02

Lab Sample ID: 890-439-9

Date Collected: 03/25/21 13:10

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1081	03/30/21 16:35	KL	XM
Total/NA	Analysis	8021B		1	1053	03/31/21 08:54	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 15:02	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		50	1307	04/04/21 16:23	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		50	1683	04/13/21 02:59	CH	XM

Client Sample ID: BH02A

Lab Sample ID: 890-439-10

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 21:43	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 15:23	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		5	1307	04/04/21 16:38	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02A

Lab Sample ID: 890-439-10

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		5	1683	04/13/21 03:18	CH	XM

Client Sample ID: BH02B

Lab Sample ID: 890-439-11

Date Collected: 03/25/21 13:30

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 08:09	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 16:05	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		20	1307	04/04/21 16:43	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		20	1683	04/13/21 03:24	CH	XM

Client Sample ID: BH02C

Lab Sample ID: 890-439-12

Date Collected: 03/25/21 13:40

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 08:29	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 16:26	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		50	1307	04/04/21 16:58	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		50	1683	04/13/21 03:42	CH	XM

Client Sample ID: BH02D

Lab Sample ID: 890-439-13

Date Collected: 03/25/21 13:50

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 08:50	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 16:48	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		50	1307	04/04/21 17:02	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		50	1683	04/13/21 03:48	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02E

Lab Sample ID: 890-439-14

Date Collected: 03/25/21 14:15

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 09:11	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 17:09	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		5	1307	04/04/21 17:07	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		5	1683	04/13/21 03:54	CH	XM

Client Sample ID: BH02F

Lab Sample ID: 890-439-15

Date Collected: 03/25/21 14:35

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 09:32	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 17:30	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 17:12	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 04:00	CH	XM

Client Sample ID: BH02G

Lab Sample ID: 890-439-16

Date Collected: 03/25/21 15:20

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 09:52	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 17:51	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 17:17	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 04:06	CH	XM

Client Sample ID: BH02H

Lab Sample ID: 890-439-17

Date Collected: 03/25/21 15:50

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 10:13	KL	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH02H

Lab Sample ID: 890-439-17

Date Collected: 03/25/21 15:50

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 18:12	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		1	1307	04/04/21 17:22	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		1	1683	04/13/21 04:13	CH	XM

Client Sample ID: BH03

Lab Sample ID: 890-439-18

Date Collected: 03/25/21 16:30

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 10:34	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 18:33	T1S	XM
Soluble	Leach	DI Leach			1058	03/30/21 10:41	SC	XM
Soluble	Analysis	300.0		5	1307	04/04/21 17:27	CH	XM
Soluble	Leach	DI Leach			1682	04/12/21 20:08	SC	XM
Soluble	Analysis	300.0		5	1683	04/13/21 04:19	CH	XM

Client Sample ID: BH03A

Lab Sample ID: 890-439-19

Date Collected: 03/25/21 16:40

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 10:54	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 18:54	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1837	04/15/21 16:56	SC	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		5	1240	04/02/21 15:28	CH	XM

Client Sample ID: BH03B

Lab Sample ID: 890-439-20

Date Collected: 03/25/21 16:45

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 11:15	KL	XM
Total/NA	Prep	8015NM Prep			1059	03/30/21 10:54	DM	XM
Total/NA	Analysis	8015B NM		1	1088	03/31/21 19:15	T1S	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03B

Lab Sample ID: 890-439-20

Date Collected: 03/25/21 16:45

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		5	1837	04/15/21 17:01	SC	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		5	1240	04/02/21 15:33	CH	XM

Client Sample ID: BH03C

Lab Sample ID: 890-439-21

Date Collected: 03/25/21 17:00

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 12:39	KL	XM
Total/NA	Prep	8015NM Prep			1065	03/30/21 11:13	DM	XM
Total/NA	Analysis	8015B NM		1	1054	03/30/21 21:50	AJ	XM
Soluble	Leach	DI Leach			1315	04/05/21 11:43	SC	XM
Soluble	Analysis	300.0		5	1330	04/05/21 19:55	CH	XM
Soluble	Leach	DI Leach			1686	04/12/21 13:00	SC	XM
Soluble	Analysis	300.0		5	1687	04/13/21 09:16	CH	XM

Client Sample ID: BH03D

Lab Sample ID: 890-439-22

Date Collected: 03/25/21 17:15

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 13:00	KL	XM
Total/NA	Prep	8015NM Prep			1065	03/30/21 11:13	DM	XM
Total/NA	Analysis	8015B NM		1	1054	03/30/21 22:54	AJ	XM
Soluble	Leach	DI Leach			1315	04/05/21 11:43	SC	XM
Soluble	Analysis	300.0		5	1330	04/05/21 20:01	CH	XM
Soluble	Leach	DI Leach			1686	04/12/21 13:00	SC	XM
Soluble	Analysis	300.0		5	1687	04/13/21 09:34	CH	XM

Client Sample ID: BH03E

Lab Sample ID: 890-439-23

Date Collected: 03/25/21 17:20

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 13:20	KL	XM
Total/NA	Prep	8015NM Prep			1065	03/30/21 11:13	DM	XM
Total/NA	Analysis	8015B NM		1	1054	03/30/21 23:16	AJ	XM
Soluble	Leach	DI Leach			1315	04/05/21 11:43	SC	XM
Soluble	Analysis	300.0		1	1330	04/05/21 20:07	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Client Sample ID: BH03E

Lab Sample ID: 890-439-23

Date Collected: 03/25/21 17:20

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			1686	04/12/21 13:00	SC	XM
Soluble	Analysis	300.0		1	1687	04/13/21 09:40	CH	XM

Client Sample ID: BH03F

Lab Sample ID: 890-439-24

Date Collected: 03/25/21 17:30

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 13:41	KL	XM
Total/NA	Prep	8015NM Prep			1065	03/30/21 11:13	DM	XM
Total/NA	Analysis	8015B NM		1	1054	03/30/21 23:37	AJ	XM
Soluble	Leach	DI Leach			1315	04/05/21 11:43	SC	XM
Soluble	Analysis	300.0		1	1330	04/05/21 20:12	CH	XM
Soluble	Leach	DI Leach			1686	04/12/21 23:22	SC	XM
Soluble	Analysis	300.0		1	1687	04/13/21 09:46	CH	XM

Client Sample ID: BH03G

Lab Sample ID: 890-439-25

Date Collected: 03/25/21 18:45

Matrix: Solid

Date Received: 03/26/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1079	03/30/21 16:17	KL	XM
Total/NA	Analysis	8021B		1	1080	03/31/21 14:02	KL	XM
Total/NA	Prep	8015NM Prep			1065	03/30/21 11:13	DM	XM
Total/NA	Analysis	8015B NM		1	1054	03/30/21 23:58	AJ	XM
Soluble	Leach	DI Leach			1315	04/05/21 11:43	SC	XM
Soluble	Analysis	300.0		1	1330	04/05/21 20:18	CH	XM
Soluble	Leach	DI Leach			1686	04/12/21 23:22	SC	XM
Soluble	Analysis	300.0		1	1687	04/13/21 09:52	CH	XM

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Carlsbad

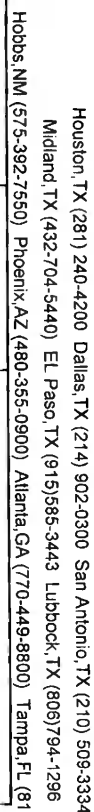
Sample Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-439-1
SDG: TE012920105

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-439-1	BH01	Solid	03/25/21 09:30	03/26/21 11:30	- 6
890-439-2	BH01 A	Solid	03/25/21 09:40	03/26/21 11:30	- 10
890-439-3	BH01B	Solid	03/25/21 09:45	03/26/21 11:30	- 15
890-439-4	BH01C	Solid	03/25/21 09:55	03/26/21 11:30	- 20
890-439-5	BH01D	Solid	03/25/21 10:10	03/26/21 11:30	- 25
890-439-6	BH01E	Solid	03/25/21 10:35	03/26/21 11:30	- 30
890-439-7	BH01F	Solid	03/25/21 11:10	03/26/21 11:30	- 35
890-439-8	BH01G	Solid	03/25/21 12:00	03/26/21 11:30	- 40
890-439-9	BH02	Solid	03/25/21 13:10	03/26/21 11:30	- 6
890-439-10	BH02A	Solid	03/25/21 13:20	03/26/21 11:30	- 10
890-439-11	BH02B	Solid	03/25/21 13:30	03/26/21 11:30	- 15
890-439-12	BH02C	Solid	03/25/21 13:40	03/26/21 11:30	- 20
890-439-13	BH02D	Solid	03/25/21 13:50	03/26/21 11:30	- 25
890-439-14	BH02E	Solid	03/25/21 14:15	03/26/21 11:30	- 30
890-439-15	BH02F	Solid	03/25/21 14:35	03/26/21 11:30	- 35
890-439-16	BH02G	Solid	03/25/21 15:20	03/26/21 11:30	- 40
890-439-17	BH02H	Solid	03/25/21 15:50	03/26/21 11:30	- 42
890-439-18	BH03	Solid	03/25/21 16:30	03/26/21 11:30	- 6
890-439-19	BH03A	Solid	03/25/21 16:40	03/26/21 11:30	- 10
890-439-20	BH03B	Solid	03/25/21 16:45	03/26/21 11:30	- 15
890-439-21	BH03C	Solid	03/25/21 17:00	03/26/21 11:30	- 20
890-439-22	BH03D	Solid	03/25/21 17:15	03/26/21 11:30	- 25
890-439-23	BH03E	Solid	03/25/21 17:20	03/26/21 11:30	- 30
890-439-24	BH03F	Solid	03/25/21 17:30	03/26/21 11:30	- 35
890-439-25	BH03G	Solid	03/25/21 18:45	03/26/21 11:30	- 40

Eurofins Xenco, Carlsbad



Chain of Custody

Work Order No:

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4/20/2021 (Rev. 1)

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

Project Name:		Hudson 1 Fed Com 008H		Turn Around	
Project Number:		TE012920105		Routine ☒ Rush:	
P.O. Number:				Due Date:	
Sampler's Name:		Spencer Lo			
SAMPLE RECEIPT					
Temperature (°C):		Temp Blank: 44/4.2		Thermometer ID	
Received intact:		☒ Yes ☐ No		Correction Factor:	
Cooler Custody Seals:		Yes ☒ No ☐ N/A		Total Containers:	
Sample Custody Seals:		Yes ☐ No ☒ N/A			
Number of Containers					
PA 8015)					
(EPA 0=8021)					
de (EPA 300.0)					
ANALYSIS REQUEST					
 890-439 Chain of Custody					
Work Order Notes Incident ID: NRM2020232730 Cost Center: 1139061001					
TAT starts the day received by the lab, if received by 4:30pm					

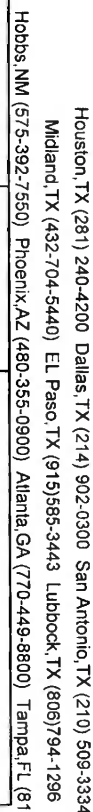
[illegible]

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3-26-21 1135			

Printed Date 05/14/18 Row 2018



Chain of Custody

Work Order No:

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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:

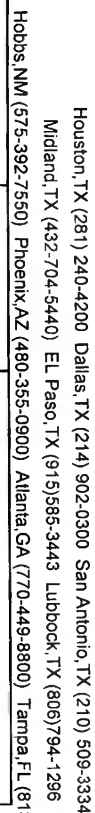
Project Name:		Hudson 1 Fed Com 008H		Turn Around		ANALYSIS REQUEST										Work Order Notes	
Project Number:		TE012920105		Routine ☒												Incident ID: NRM2020232730	
P.O. Number:				Rush:												Cost Center: 1139061001	
Sampler's Name:		Spencer Lo		Due Date:													
SAMPLE RECEIPT				Temp Blank:		Yes		No		Wet Ice:		☒ Yes		☐ No			
Temperature (°C):										Thermometer ID							
Received Intact:				Yes		No				12		1					
Cooler Custody Seals:				Yes		No		N/A		Correction Factor:							
Sample Custody Seals:				Yes		No		N/A		Total Containers:							
Number of Containers																	
(EPA 8015)																	
(EPA 0=8021)																	
(EPA 300.0)																	
TAT starts the day received by the lab, if received by 4:30pm																	

[illegible]

Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn		
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		3-26-21 11:30	2		
3			4		
5			6		



Chain of Custody

Work Order No:

-620-2000

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Page

of

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
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, Tacoma.Morrissey@wsp.com, Dan.Moir@wsp.com

Work Order Comments									
Program: UST/ST ☐ RRP ☐ Brownfields ☐ RC ☐ Superfund ☐									
State of Project:									
Reporting Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐									
Deliverables: EDD ☐ ADaPT ☐ Other:									

ANALYSIS REQUEST										Work Order Notes	
Project Name:		Hudson 1 Fed Com 008H			Turn Around					Incident ID: NRM2020232730	
Project Number:		TE012920105			Routine					Cost Center: 1139061001	
P.O. Number:					Rush:						
Sampler's Name:		Spencer Lo			Due Date:						
SAMPLE RECEIPT					Temp Blank:		Yes	No	Wet Ice:	Yes	No
Temperature (°C):					Thermometer ID						
Received intact:		Yes			No						
Cooler Custody Seals:		Yes			No		N/A		Correction Factor:		
Sample Custody Seals:		Yes			No		N/A		Total Containers:		
Number of Containers											
EPA 8015)											
EPA 0=8021)											
EPA 300.0)											
TAT starts the day received by the lab, if received by 4:30pm											

[illegible]

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		3-21-21 1130	2		
3			4		
5			6		

Revised Date 05/14/18 Row 2018

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-439-1

SDG Number: TE012920105

Login Number: 439**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: 890-439-1
SDG Number: TE012920105**Login Number: 439****List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 03/29/21 12:03 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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Certificate of Analysis Summary 667435



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: 012920105

Contact: Dan Moir

Project Location: Eddy

Date Received in Lab: Thu 07.16.2020 12:15

Report Date: 07.20.2020 10:47

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	667435-001	667435-002	667435-003	667435-004		
	Field Id:	SS01	SS02	SS03	SS04		
	Depth:	0.5- ft	0.5- ft	0.5- ft	0.5- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	07.16.2020 09:47	07.16.2020 09:49	07.16.2020 09:51	07.16.2020 09:52		
BTEX by EPA 8021B	Extracted:	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00	07.16.2020 16:00		
	Analyzed:	07.17.2020 00:42	07.17.2020 01:03	07.17.2020 01:23	07.17.2020 01:44		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00500 0.00500	<0.00490 0.00490	<0.00556 0.00556	<0.00490 0.00490		
Toluene		<0.00550 0.00550	<0.00539 0.00539	<0.00611 0.00611	<0.00539 0.00539		
Ethylbenzene		0.233 0.0200	<0.00490 0.00490	<0.00556 0.00556	<0.00490 0.00490		
m,p-Xylenes		0.819 0.0400	0.144 0.0392	<0.0111 0.0111	0.314 0.0392		
o-Xylene		0.458 0.0200	1.78 0.0196	1.67 0.0222	0.285 0.0196		
Total Xylenes		1.28 0.0200	1.92 0.0196	1.67 0.0111	0.599 0.0196		
Total BTEX		1.51 0.00500	1.92 0.00490	1.67 0.00556	0.599 0.00490		
Chloride by EPA 300	Extracted:	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47	07.16.2020 15:47		
	Analyzed:	07.16.2020 17:46	07.16.2020 17:52	07.16.2020 17:57	07.16.2020 18:03		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		22600 1000	43800 1000	87600 998	53800 1010		
TPH by SW8015 Mod	Extracted:	07.16.2020 13:47	07.16.2020 13:47	07.16.2020 13:45	07.16.2020 13:45		
	Analyzed:	07.16.2020 20:38	07.16.2020 20:59	07.16.2020 19:58	07.16.2020 20:18		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<250 250	<250 250	<251 251	413 251		
Diesel Range Organics (DRO)		15100 250	17200 250	21400 251	19800 251		
Motor Oil Range Hydrocarbons (MRO)		1840 250	2320 250	3040 251	2490 251		
Total GRO-DRO		15100 250	17200 250	21400 251	20200 251		
Total TPH		16900 250	19500 250	24400 251	22700 251		

BRL - Below Reporting Limit

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



Xenco

Analytical Report 667435

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson 1 Fed Com 008H

012920105

07.20.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.20.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **667435**

Hudson 1 Fed Com 008H

Project Address: Eddy

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) 667435. 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. 667435 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,

A handwritten signature in black ink that reads "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

**Sample Cross Reference 667435****LT Environmental, Inc., Arvada, CO**

Hudson 1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	07.16.2020 09:47	0.5 ft	667435-001
SS02	S	07.16.2020 09:49	0.5 ft	667435-002
SS03	S	07.16.2020 09:51	0.5 ft	667435-003
SS04	S	07.16.2020 09:52	0.5 ft	667435-004



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hudson 1 Fed Com 008H

Project ID: 012920105
Work Order Number(s): 667435

Report Date: 07.20.2020
Date Received: 07.16.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3131933 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 667435-003.



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS01** Matrix: Soil Date Received: 07.16.2020 12:15
 Lab Sample Id: 667435-001 Date Collected: 07.16.2020 09:47 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22600	1000	mg/kg	07.16.2020 17:46		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 13:47 Basis: Wet Weight
 Seq Number: 3131902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	07.16.2020 20:38	U	5
Diesel Range Organics (DRO)	C10C28DRO	15100	250	mg/kg	07.16.2020 20:38		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1840	250	mg/kg	07.16.2020 20:38		5
Total GRO-DRO	PHC628	15100	250	mg/kg	07.16.2020 20:38		5
Total TPH	PHC635	16900	250	mg/kg	07.16.2020 20:38		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	07.16.2020 20:38	
o-Terphenyl	84-15-1	105	%	70-135	07.16.2020 20:38	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS01**
Lab Sample Id: 667435-001

Matrix: Soil
Date Collected: 07.16.2020 09:47

Date Received: 07.16.2020 12:15
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.16.2020 16:00

Basis: Wet Weight

Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/kg	07.17.2020 00:42	U	1
Toluene	108-88-3	<0.00550	0.00550	mg/kg	07.17.2020 00:42	U	1
Ethylbenzene	100-41-4	0.233	0.0200	mg/kg	07.17.2020 00:42		1
m,p-Xylenes	179601-23-1	0.819	0.0400	mg/kg	07.17.2020 00:42		1
o-Xylene	95-47-6	0.458	0.0200	mg/kg	07.17.2020 00:42		1
Total Xylenes	1330-20-7	1.28	0.0200	mg/kg	07.17.2020 00:42		1
Total BTEX		1.51	0.00500	mg/kg	07.17.2020 00:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.17.2020 00:42	
4-Bromofluorobenzene	460-00-4	112	%	70-130	07.17.2020 00:42	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS02** Matrix: Soil Date Received: 07.16.2020 12:15
 Lab Sample Id: 667435-002 Date Collected: 07.16.2020 09:49 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43800	1000	mg/kg	07.16.2020 17:52		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 13:47 Basis: Wet Weight
 Seq Number: 3131902

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	07.16.2020 20:59	U	5
Diesel Range Organics (DRO)	C10C28DRO	17200	250	mg/kg	07.16.2020 20:59		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	2320	250	mg/kg	07.16.2020 20:59		5
Total GRO-DRO	PHC628	17200	250	mg/kg	07.16.2020 20:59		5
Total TPH	PHC635	19500	250	mg/kg	07.16.2020 20:59		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	07.16.2020 20:59	
o-Terphenyl	84-15-1	111	%	70-135	07.16.2020 20:59	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS02**
Lab Sample Id: 667435-002

Matrix: Soil
Date Collected: 07.16.2020 09:49

Date Received: 07.16.2020 12:15
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.16.2020 16:00

Basis: Wet Weight

Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00490	0.00490	mg/kg	07.17.2020 01:03	U	1
Toluene	108-88-3	<0.00539	0.00539	mg/kg	07.17.2020 01:03	U	1
Ethylbenzene	100-41-4	<0.00490	0.00490	mg/kg	07.17.2020 01:03	U	1
m,p-Xylenes	179601-23-1	0.144	0.0392	mg/kg	07.17.2020 01:03		1
o-Xylene	95-47-6	1.78	0.0196	mg/kg	07.17.2020 01:03		1
Total Xylenes	1330-20-7	1.92	0.0196	mg/kg	07.17.2020 01:03		1
Total BTEX		1.92	0.00490	mg/kg	07.17.2020 01:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	07.17.2020 01:03	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.17.2020 01:03	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS03** Matrix: Soil Date Received: 07.16.2020 12:15
 Lab Sample Id: 667435-003 Date Collected: 07.16.2020 09:51 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	87600	998	mg/kg	07.16.2020 17:57		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 13:45 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	07.16.2020 19:58	U	5
Diesel Range Organics (DRO)	C10C28DRO	21400	251	mg/kg	07.16.2020 19:58		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	3040	251	mg/kg	07.16.2020 19:58		5
Total GRO-DRO	PHC628	21400	251	mg/kg	07.16.2020 19:58		5
Total TPH	PHC635	24400	251	mg/kg	07.16.2020 19:58		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	141	%	70-135	07.16.2020 19:58	**
o-Terphenyl	84-15-1	113	%	70-135	07.16.2020 19:58	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS03**
Lab Sample Id: 667435-003

Matrix: Soil
Date Collected: 07.16.2020 09:51

Date Received: 07.16.2020 12:15
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.16.2020 16:00

Basis: Wet Weight

Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00556	0.00556	mg/kg	07.17.2020 01:23	U	1
Toluene	108-88-3	<0.00611	0.00611	mg/kg	07.17.2020 01:23	U	1
Ethylbenzene	100-41-4	<0.00556	0.00556	mg/kg	07.17.2020 01:23	U	1
m,p-Xylenes	179601-23-1	<0.0111	0.0111	mg/kg	07.17.2020 01:23	U	1
o-Xylene	95-47-6	1.67	0.0222	mg/kg	07.17.2020 01:23		1
Total Xylenes	1330-20-7	1.67	0.0111	mg/kg	07.17.2020 01:23		1
Total BTEX		1.67	0.00556	mg/kg	07.17.2020 01:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.17.2020 01:23	
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.17.2020 01:23	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS04** Matrix: Soil Date Received: 07.16.2020 12:15
 Lab Sample Id: 667435-004 Date Collected: 07.16.2020 09:52 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.16.2020 15:47 Basis: Wet Weight
 Seq Number: 3131940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53800	1010	mg/kg	07.16.2020 18:03		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.16.2020 13:45 Basis: Wet Weight
 Seq Number: 3131933

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	413	251	mg/kg	07.16.2020 20:18		5
Diesel Range Organics (DRO)	C10C28DRO	19800	251	mg/kg	07.16.2020 20:18		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	2490	251	mg/kg	07.16.2020 20:18		5
Total GRO-DRO	PHC628	20200	251	mg/kg	07.16.2020 20:18		5
Total TPH	PHC635	22700	251	mg/kg	07.16.2020 20:18		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	07.16.2020 20:18	
o-Terphenyl	84-15-1	114	%	70-135	07.16.2020 20:18	



Certificate of Analytical Results 667435

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SS04**
Lab Sample Id: 667435-004

Matrix: Soil
Date Collected: 07.16.2020 09:52

Date Received: 07.16.2020 12:15
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.16.2020 16:00

Basis: Wet Weight

Seq Number: 3131937

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00490	0.00490	mg/kg	07.17.2020 01:44	U	1
Toluene	108-88-3	<0.00539	0.00539	mg/kg	07.17.2020 01:44	U	1
Ethylbenzene	100-41-4	<0.00490	0.00490	mg/kg	07.17.2020 01:44	U	1
m,p-Xylenes	179601-23-1	0.314	0.0392	mg/kg	07.17.2020 01:44		1
o-Xylene	95-47-6	0.285	0.0196	mg/kg	07.17.2020 01:44		1
Total Xylenes	1330-20-7	0.599	0.0196	mg/kg	07.17.2020 01:44		1
Total BTEX		0.599	0.00490	mg/kg	07.17.2020 01:44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	07.17.2020 01:44	
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.17.2020 01:44	

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

LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

MB Sample Id: 7707504-1-BLK

Matrix: Solid

LCS Sample Id: 7707504-1-BKS

Prep Method: E300P

Date Prep: 07.16.2020

LCSD Sample Id: 7707504-1-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	250	254	102	265	106	90-110	4	20	mg/kg	07.16.2020 16:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

Parent Sample Id: 667349-038

Matrix: Soil

MS Sample Id: 667349-038 S

Prep Method: E300P

Date Prep: 07.16.2020

MSD Sample Id: 667349-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.1	200	211	100	210	100	90-110	0	20	mg/kg	07.16.2020 17:02	

Analytical Method: Chloride by EPA 300

Seq Number: 3131940

Parent Sample Id: 667438-003

Matrix: Soil

MS Sample Id: 667438-003 S

Prep Method: E300P

Date Prep: 07.16.2020

MSD Sample Id: 667438-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.0	200	219	99	220	99	90-110	0	20	mg/kg	07.16.2020 18:25	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

MB Sample Id: 7707495-1-BLK

Matrix: Solid

LCS Sample Id: 7707495-1-BKS

Prep Method: SW8015P

Date Prep: 07.16.2020

LCSD Sample Id: 7707495-1-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	1020	102	945	95	70-135	8	35	mg/kg	07.16.2020 12:52	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1080	108	70-135	3	35	mg/kg	07.16.2020 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		128		123		70-135	%	07.16.2020 12:52
o-Terphenyl	103		127		117		70-135	%	07.16.2020 12:52

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

MB Sample Id: 7707491-1-BLK

Matrix: Solid

LCS Sample Id: 7707491-1-BKS

Prep Method: SW8015P

Date Prep: 07.16.2020

LCSD Sample Id: 7707491-1-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	860	86	744	74	70-135	14	35	mg/kg	07.16.2020 12:52	
Diesel Range Organics (DRO)	<50.0	1000	984	98	800	80	70-135	21	35	mg/kg	07.16.2020 12:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		123		106		70-135	%	07.16.2020 12:52
o-Terphenyl	105		106		87		70-135	%	07.16.2020 12:52

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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

LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.16.2020

MB Sample Id: 7707495-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.16.2020 12:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.16.2020

MB Sample Id: 7707491-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.16.2020 12:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131902

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.16.2020

Parent Sample Id: 667349-017

MS Sample Id: 667349-017 S

MSD Sample Id: 667349-017 SD

Parameter

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)	<50.1	1000	1000	100	941	94	70-135	6	35	mg/kg	07.16.2020 13:53	
Diesel Range Organics (DRO)	<50.1	1000	1140	114	1090	109	70-135	4	35	mg/kg	07.16.2020 13:53	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		121		70-135	%	07.16.2020 13:53
o-Terphenyl	122		116		70-135	%	07.16.2020 13:53

Analytical Method: TPH by SW8015 Mod

Seq Number: 3131933

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.16.2020

Parent Sample Id: 667349-037

MS Sample Id: 667349-037 S

MSD Sample Id: 667349-037 SD

Parameter

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)	<50.0	999	944	94	1040	104	70-135	10	35	mg/kg	07.16.2020 13:53	
Diesel Range Organics (DRO)	<50.0	999	1090	109	1200	120	70-135	10	35	mg/kg	07.16.2020 13:53	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		132		70-135	%	07.16.2020 13:53
o-Terphenyl	114		125		70-135	%	07.16.2020 13:53

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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

LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3131937

MB Sample Id: 7707480-1-BLK

Matrix: Solid

LCS Sample Id: 7707480-1-BKS

Prep Method: SW5035A

Date Prep: 07.16.2020

LCSD Sample Id: 7707480-1-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	0.0779	78	0.104	104	70-130	29	35	mg/kg	07.16.2020 14:34	
Toluene	<0.00200	0.100	0.0739	74	0.0996	100	70-130	30	35	mg/kg	07.16.2020 14:34	
Ethylbenzene	<0.00200	0.100	0.0788	79	0.105	105	71-129	29	35	mg/kg	07.16.2020 14:34	
m,p-Xylenes	<0.00400	0.200	0.159	80	0.213	107	70-135	29	35	mg/kg	07.16.2020 14:34	
o-Xylene	<0.00200	0.100	0.0792	79	0.105	105	71-133	28	35	mg/kg	07.16.2020 14:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		98		70-130	%	07.16.2020 14:34
4-Bromofluorobenzene	105		97		99		70-130	%	07.16.2020 14:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3131937

Parent Sample Id: 667349-037

Matrix: Soil

MS Sample Id: 667349-037 S

Prep Method: SW5035A

Date Prep: 07.16.2020

MSD Sample Id: 667349-037 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	0.0998	0.0952	95	0.104	103	70-130	9	35	mg/kg	07.16.2020 21:24	
Toluene	<0.00200	0.0998	0.0899	90	0.100	99	70-130	11	35	mg/kg	07.16.2020 21:24	
Ethylbenzene	<0.00200	0.0998	0.0939	94	0.102	101	71-129	8	35	mg/kg	07.16.2020 21:24	
m,p-Xylenes	<0.00399	0.200	0.192	96	0.207	102	70-135	8	35	mg/kg	07.16.2020 21:24	
o-Xylene	<0.00200	0.0998	0.0946	95	0.102	101	71-133	8	35	mg/kg	07.16.2020 21:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	07.16.2020 21:24
4-Bromofluorobenzene	100		97		70-130	%	07.16.2020 21:24

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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: 16167435

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 Litrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	wmather@ltenv.com, dmoir@ltenv.com

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

Project Name:	Hudson 1 Fed Com 008H	Turn Around	
Project Number:	012920105	Routine	☒
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Temperature (°C):	3.4 / 3.2				
	Received Intact:	Yes	No	Thermometer ID	FNM007	
	Cooler Custody Seals:	Yes	No	Correction Factor:	-0.2	
	Sample Custody Seals:	Yes	No	Total Containers:	4	

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA)	BTEX (EPA)	Chloride (EPA)											lab, if received by 4:30pm
															Sample Comments								
SS01	S	7/16/2020	9:47	0.5'	1	X	X	X										Composite					
SS02	S	7/16/2020	9:49	0.5'	1	X	X	X										Composite					
SS03	S	7/16/2020	9:51	0.5'	1	X	X	X										Composite					
SS04	S	7/16/2020	9:52	0.5'	1	X	X	X										Composite					
<i>[Handwritten signature]</i>																							
																			</				

Total 200.7 / 6010 200.8 / 6020:

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

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.

1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	7/16/20 12:15			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.16.2020 12.15.00 PM

Work Order #: 667435

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
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 07.16.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.20.2020

Certificate of Analysis Summary 668065



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: 012919921

Date Received in Lab: Thu 07.23.2020 14:21

Contact: Dan Moir

Report Date: 07.27.2020 12:55

Project Location: Eddy

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668065-001	668065-002	668065-003	668065-004		
	<i>Field Id:</i>	BH01	BH01A	BH02	BH02A		
	<i>Depth:</i>	2- ft	4- ft	3- ft	4- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	07.23.2020 09:31	07.23.2020 10:03	07.23.2020 11:16	07.23.2020 11:21		
BTEX by EPA 8021B	<i>Extracted:</i>	07.24.2020 09:35	07.24.2020 09:35	07.24.2020 09:35	07.24.2020 09:35		
	<i>Analyzed:</i>	07.24.2020 14:43	07.24.2020 15:04	07.25.2020 03:57	07.24.2020 16:20		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.0190 0.0190	<0.00401 0.00401		
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
Total BTEX		<0.00201 0.00201	<0.00199 0.00199	<0.00952 0.00952	<0.00200 0.00200		
Chloride by EPA 300	<i>Extracted:</i>	07.24.2020 12:28	07.24.2020 12:28	07.24.2020 12:28	07.24.2020 12:28		
	<i>Analyzed:</i>	07.24.2020 14:25	07.24.2020 14:42	07.24.2020 14:48	07.24.2020 14:53		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		25700 1000	29500 1010	30300 1000	25700 990		
TPH by SW8015 Mod	<i>Extracted:</i>	07.23.2020 17:10	07.24.2020 12:15	07.24.2020 12:15	07.24.2020 12:15		
	<i>Analyzed:</i>	07.24.2020 06:04	07.24.2020 12:28	07.24.2020 13:29	07.24.2020 13:49		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<50.2 50.2	<50.1 50.1		
Diesel Range Organics (DRO)		86.5 50.1	<50.1 50.1	372 50.2	168 50.1		
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.2 50.2	<50.1 50.1		
Total GRO-DRO		86.5 50.1	<50.1 50.1	372 50.2	168 50.1		
Total TPH		86.5 50.1	<50.1 50.1	372 50.2	168 50.1		

BRL - Below Reporting Limit

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



Analytical Report 668065

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson 1 Fed Com 008H

012919921

07.27.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.27.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **668065**

Hudson 1 Fed Com 008H

Project Address: Eddy

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) 668065. 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. 668065 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,

A handwritten signature in black ink that reads "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

**Sample Cross Reference 668065****LT Environmental, Inc., Arvada, CO**

Hudson 1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	07.23.2020 09:31	2 ft	668065-001
BH01A	S	07.23.2020 10:03	4 ft	668065-002
BH02	S	07.23.2020 11:16	3 ft	668065-003
BH02A	S	07.23.2020 11:21	4 ft	668065-004



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hudson 1 Fed Com 008H

Project ID: 012919921
Work Order Number(s): 668065

Report Date: 07.27.2020
Date Received: 07.23.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH01** Matrix: Soil Date Received: 07.23.2020 14:21
 Lab Sample Id: 668065-001 Date Collected: 07.23.2020 09:31 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.24.2020 12:28 Basis: Wet Weight
 Seq Number: 3132658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25700	1000	mg/kg	07.24.2020 14:25		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.23.2020 17:10 Basis: Wet Weight
 Seq Number: 3132505

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.24.2020 06:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	86.5	50.1	mg/kg	07.24.2020 06:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.24.2020 06:04	U	1
Total GRO-DRO	PHC628	86.5	50.1	mg/kg	07.24.2020 06:04		1
Total TPH	PHC635	86.5	50.1	mg/kg	07.24.2020 06:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	07.24.2020 06:04	
o-Terphenyl	84-15-1	119	%	70-135	07.24.2020 06:04	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH01**
Lab Sample Id: 668065-001

Matrix: Soil
Date Collected: 07.23.2020 09:31

Date Received: 07.23.2020 14:21
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.24.2020 09:35

Basis: Wet Weight

Seq Number: 3132662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.24.2020 14:43	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.24.2020 14:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.24.2020 14:43	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.24.2020 14:43	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH01A** Matrix: Soil Date Received: 07.23.2020 14:21
 Lab Sample Id: 668065-002 Date Collected: 07.23.2020 10:03 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.24.2020 12:28 Basis: Wet Weight
 Seq Number: 3132658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29500	1010	mg/kg	07.24.2020 14:42		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.24.2020 12:15 Basis: Wet Weight
 Seq Number: 3132634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.24.2020 12:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.24.2020 12:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.24.2020 12:28	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.24.2020 12:28	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.24.2020 12:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	07.24.2020 12:28	
o-Terphenyl	84-15-1	124	%	70-135	07.24.2020 12:28	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH01A**
Lab Sample Id: 668065-002

Matrix: Soil
Date Collected: 07.23.2020 10:03

Date Received: 07.23.2020 14:21
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.24.2020 09:35

Basis: Wet Weight

Seq Number: 3132662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.24.2020 15:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.24.2020 15:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.24.2020 15:04		
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.24.2020 15:04		



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH02** Matrix: Soil Date Received: 07.23.2020 14:21
 Lab Sample Id: 668065-003 Date Collected: 07.23.2020 11:16 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.24.2020 12:28 Basis: Wet Weight
 Seq Number: 3132658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	30300	1000	mg/kg	07.24.2020 14:48		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.24.2020 12:15 Basis: Wet Weight
 Seq Number: 3132634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.24.2020 13:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	372	50.2	mg/kg	07.24.2020 13:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.24.2020 13:29	U	1
Total GRO-DRO	PHC628	372	50.2	mg/kg	07.24.2020 13:29		1
Total TPH	PHC635	372	50.2	mg/kg	07.24.2020 13:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	07.24.2020 13:29	
o-Terphenyl	84-15-1	122	%	70-135	07.24.2020 13:29	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH02**
Lab Sample Id: 668065-003

Matrix: Soil
Date Collected: 07.23.2020 11:16

Date Received: 07.23.2020 14:21
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.24.2020 09:35

Basis: Wet Weight

Seq Number: 3132662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1
Toluene	108-88-3	<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1
Ethylbenzene	100-41-4	<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1
m,p-Xylenes	179601-23-1	<0.0190	0.0190	mg/kg	07.25.2020 03:57	U	1
o-Xylene	95-47-6	<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1
Total Xylenes	1330-20-7	<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1
Total BTEX		<0.00952	0.00952	mg/kg	07.25.2020 03:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	07.25.2020 03:57	
1,4-Difluorobenzene	540-36-3	97	%	70-130	07.25.2020 03:57	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH02A** Matrix: Soil Date Received: 07.23.2020 14:21
 Lab Sample Id: 668065-004 Date Collected: 07.23.2020 11:21 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.24.2020 12:28 Basis: Wet Weight
 Seq Number: 3132658

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25700	990	mg/kg	07.24.2020 14:53		100

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.24.2020 12:15 Basis: Wet Weight
 Seq Number: 3132634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.24.2020 13:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	168	50.1	mg/kg	07.24.2020 13:49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.24.2020 13:49	U	1
Total GRO-DRO	PHC628	168	50.1	mg/kg	07.24.2020 13:49		1
Total TPH	PHC635	168	50.1	mg/kg	07.24.2020 13:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	07.24.2020 13:49	
o-Terphenyl	84-15-1	120	%	70-135	07.24.2020 13:49	



Certificate of Analytical Results 668065

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **BH02A**
Lab Sample Id: 668065-004

Matrix: Soil
Date Collected: 07.23.2020 11:21

Date Received: 07.23.2020 14:21
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.24.2020 09:35

Basis: Wet Weight

Seq Number: 3132662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.24.2020 16:20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.24.2020 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	07.24.2020 16:20	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.24.2020 16:20	



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



LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

MB Sample Id: 7708057-1-BLK

Matrix: Solid

LCS Sample Id: 7708057-1-BKS

Prep Method: E300P

Date Prep: 07.24.2020

LCSD Sample Id: 7708057-1-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	250	265	106	274	110	90-110	3	20	mg/kg	07.24.2020 13:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

Parent Sample Id: 668098-001

Matrix: Soil

MS Sample Id: 668098-001 S

Prep Method: E300P

Date Prep: 07.24.2020

MSD Sample Id: 668098-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	310	200	518	104	517	104	90-110	0	20	mg/kg	07.24.2020 13:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3132658

Parent Sample Id: 668154-005

Matrix: Soil

MS Sample Id: 668154-005 S

Prep Method: E300P

Date Prep: 07.24.2020

MSD Sample Id: 668154-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	136	199	339	102	342	104	90-110	1	20	mg/kg	07.24.2020 15:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

MB Sample Id: 7707984-1-BLK

Matrix: Solid

LCS Sample Id: 7707984-1-BKS

Prep Method: SW8015P

Date Prep: 07.23.2020

LCSD Sample Id: 7707984-1-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	950	95	988	99	70-135	4	35	mg/kg	07.23.2020 21:55	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1160	116	70-135	4	35	mg/kg	07.23.2020 21:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		127		126		70-135	%	07.23.2020 21:55
o-Terphenyl	121		119		126		70-135	%	07.23.2020 21:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132634

MB Sample Id: 7708098-1-BLK

Matrix: Solid

LCS Sample Id: 7708098-1-BKS

Prep Method: SW8015P

Date Prep: 07.24.2020

LCSD Sample Id: 7708098-1-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	968	97	1010	101	70-135	4	35	mg/kg	07.24.2020 11:29	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1160	116	70-135	4	35	mg/kg	07.24.2020 11:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		127		129		70-135	%	07.24.2020 11:29
o-Terphenyl	120		117		125		70-135	%	07.24.2020 11:29

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.23.2020

MB Sample Id: 7707984-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

07.23.2020 21:35

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132634

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.24.2020

MB Sample Id: 7708098-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

07.24.2020 11:09

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132505

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.23.2020

Parent Sample Id: 668043-023

MS Sample Id: 668043-023 S

MSD Sample Id: 668043-023 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.1

Spike
Amount

1000

MS
Result

1090

MS
%Rec

109

MSD
Result

977

MSD
%Rec

97

Limits

70-135

%RPD

11

RPD
Limit

35

Units

mg/kg

Analysis
Date

07.23.2020 22:57

Flag

Diesel Range Organics (DRO)

<50.1

1000

1140

114

1140

113

70-135

0

35

mg/kg

07.23.2020 22:57

Surrogate

1-Chlorooctane

MS
%Rec

131

MS
FlagMSD
%Rec

129

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

07.23.2020 22:57

o-Terphenyl

122

114

70-135

%

07.23.2020 22:57

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132634

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.24.2020

Parent Sample Id: 668065-002

MS Sample Id: 668065-002 S

MSD Sample Id: 668065-002 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.2

Spike
Amount

1000

MS
Result

977

MS
%Rec

98

MSD
Result

968

MSD
%Rec

97

Limits

70-135

%RPD

1

RPD
Limit

35

Units

mg/kg

Analysis
Date

07.24.2020 12:48

Flag

Diesel Range Organics (DRO)

<50.2

1000

1030

103

1020

102

70-135

1

35

mg/kg

07.24.2020 12:48

Surrogate

1-Chlorooctane

MS
%Rec

135

MS
FlagMSD
%Rec

133

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

07.24.2020 12:48

o-Terphenyl

126

127

70-135

%

07.24.2020 12:48

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132662

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.24.2020

MB Sample Id: 7708007-1-BLK

LCS Sample Id: 7708007-1-BKS

LCSD Sample Id: 7708007-1-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	0.103	103	0.100	100	70-130	3	35	mg/kg	07.24.2020 11:45	
Toluene	<0.00200	0.100	0.0978	98	0.0947	95	70-130	3	35	mg/kg	07.24.2020 11:45	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0978	98	71-129	2	35	mg/kg	07.24.2020 11:45	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.197	99	70-135	3	35	mg/kg	07.24.2020 11:45	
o-Xylene	<0.00200	0.100	0.102	102	0.0994	99	71-133	3	35	mg/kg	07.24.2020 11:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		99		70-130	%	07.24.2020 11:45
4-Bromofluorobenzene	104		99		100		70-130	%	07.24.2020 11:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132662

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.24.2020

Parent Sample Id: 668056-011

MS Sample Id: 668056-011 S

MSD Sample Id: 668056-011 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	0.0998	0.100	100	0.0990	99	70-130	1	35	mg/kg	07.24.2020 13:42	
Toluene	<0.00200	0.0998	0.0944	95	0.0930	93	70-130	1	35	mg/kg	07.24.2020 13:42	
Ethylbenzene	<0.00200	0.0998	0.0984	99	0.0934	93	71-129	5	35	mg/kg	07.24.2020 13:42	
m,p-Xylenes	<0.00399	0.200	0.197	99	0.190	95	70-135	4	35	mg/kg	07.24.2020 13:42	
o-Xylene	<0.00200	0.0998	0.0983	98	0.0946	95	71-133	4	35	mg/kg	07.24.2020 13:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		98		70-130	%	07.24.2020 13:42
4-Bromofluorobenzene	103		102		70-130	%	07.24.2020 13:42

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



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
Phoenix, AZ (602) 998-4444 Albuquerque, NM (505) 263-4444
Hobbs, NM (575) 392-7650 Atlanta, GA (770) 449-8800 Tampa, FL (813) 281-4444

Page 1 of 1
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Chain of Custody

Work Order No:

leaves

Project Manager:		Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:		LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:		3300 North A Street	Address:	
City, State ZIP:		Midland, Tx 79705	City, State ZIP:	
Phone:		(432) 236-3849	Email:	wmather@ltenv.com, dmoir@ltenv.com

Work Order Comments Program: UST/PT ☐ RP ☐ Grow/fields ☐ RC ☐ perfund ☐ State of Project: Reporting: Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other: ☐	
---	--

Project Name:	Hudson 1 Fed Com 008H	Turn Around	
Project Number:	C12919221	Routine	☒
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	
SAMPLE RECEIPT			
Temperature ('C):	3.4 / 3.2	Temp Blank:	(Yes) No Wet Ice: Yes No
Received In tact:	(Yes) No	Thermometer ID	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.7
Sample Custody Seals:	Yes No N/A	Total Containers:	4
Number of Containers			
(EPA 8015)			
(EPA 0=8021)			
(EPA 300.0)			
TAT starts the day received by the lab, if received by 4:30pm			

[illegible]

Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA	13PPM	Texas 11
TCLP / SPLP 6010:	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
		1631 / 245.1 / 77470 / 77471 : 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
		7/23/2013			
		1/4/21			

Revised Date: 05/14/18 Rev: 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.23.2020 02.21.00 PM

Work Order #: 668065

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
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 07.23.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.24.2020

Certificate of Analysis Summary 673428



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: 012920105

Date Received in Lab: Wed 09.23.2020 16:40

Contact: Dan Moir

Report Date: 09.28.2020 14:19

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673428-001	673428-002	673428-003	673428-004	673428-005	673428-006
	<i>Field Id:</i>	SW01	SW02	SW03	SW04	SW05	SW06
	<i>Depth:</i>	0-5 ft	0-5 ft	0-5 ft	0-5 ft	0-5 ft	0-5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.21.2020 13:00	09.21.2020 13:15	09.21.2020 13:30	09.21.2020 13:45	09.21.2020 14:00	09.21.2020 14:15
BTEX by EPA 8021B	<i>Extracted:</i>	09.25.2020 16:43	09.25.2020 16:43	09.25.2020 16:43	09.25.2020 16:43	09.25.2020 16:43	09.25.2020 16:43
	<i>Analyzed:</i>	09.26.2020 06:02	09.26.2020 06:25	09.26.2020 06:47	09.26.2020 07:10	09.26.2020 07:32	09.26.2020 07:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00401 0.00401	<0.00397 0.00397	<0.00398 0.00398	<0.00399 0.00399	<0.00400 0.00400	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30
	<i>Analyzed:</i>	09.24.2020 18:12	09.24.2020 18:29	09.24.2020 18:34	09.24.2020 18:40	09.24.2020 18:45	09.24.2020 19:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		64.5 9.90	170 10.0	397 10.0	293 9.92	431 10.1	28.8 10.1
TPH by SW8015 Mod	<i>Extracted:</i>	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30
	<i>Analyzed:</i>	09.24.2020 20:54	09.24.2020 21:55	09.24.2020 22:15	09.24.2020 22:35	09.24.2020 22:55	09.24.2020 23:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.3 50.3	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<50.3 50.3	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.2 50.2
Total TPH		<50.3 50.3	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.2 50.2

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 673428



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: 012920105

Date Received in Lab: Wed 09.23.2020 16:40

Contact: Dan Moir

Report Date: 09.28.2020 14:19

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673428-007	673428-008	673428-009	673428-010	673428-011	673428-012
	<i>Field Id:</i>	SW07	SW08	SW09	SW10	SW11	SW12
	<i>Depth:</i>	0-5 ft	0-5 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.21.2020 14:30	09.21.2020 14:45	09.22.2020 14:30	09.22.2020 14:15	09.22.2020 14:00	09.22.2020 13:45
BTEX by EPA 8021B	<i>Extracted:</i>	09.25.2020 16:43	09.25.2020 15:39	09.25.2020 15:39	09.25.2020 15:39	09.25.2020 15:39	09.25.2020 15:39
	<i>Analyzed:</i>	09.26.2020 08:17	09.26.2020 04:49	09.26.2020 05:11	09.26.2020 05:34	09.26.2020 05:56	09.26.2020 09:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
m,p-Xylenes		<0.00396 0.00396	<0.00403 0.00403	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30
	<i>Analyzed:</i>	09.24.2020 19:08	09.24.2020 19:13	09.24.2020 19:19	09.24.2020 19:24	09.24.2020 19:30	09.24.2020 19:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		191 9.90	134 10.0	27.7 9.92	425 10.0	200 9.98	226 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30
	<i>Analyzed:</i>	09.24.2020 23:35	09.24.2020 23:56	09.25.2020 00:16	09.25.2020 00:36	09.25.2020 01:16	09.25.2020 01:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1
Diesel Range Organics (DRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1
Total GRO-DRO		<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1
Total TPH		<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.1 50.1

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 673428



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: 012920105

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 09.23.2020 16:40

Report Date: 09.28.2020 14:19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	673428-013	673428-014	673428-015			
	Field Id:	SW13	SW14	SW15			
	Depth:	0-2 ft	0-5 ft	0-5 ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	09.22.2020 13:30	09.22.2020 15:00	09.22.2020 14:45			
BTEX by EPA 8021B	Extracted:	09.25.2020 15:39	09.25.2020 15:39	09.25.2020 15:39			
	Analyzed:	09.26.2020 06:41	09.26.2020 07:04	09.26.2020 07:26			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
Toluene		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
Ethylbenzene		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
m,p-Xylenes		<0.00403 0.00403	<0.00397 0.00397	<0.00398 0.00398			
o-Xylene		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
Total Xylenes		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
Total BTEX		<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199			
Chloride by EPA 300	Extracted:	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30			
	Analyzed:	09.24.2020 19:52	09.24.2020 20:09	09.24.2020 20:15			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		46.5 10.1	222 9.94	331 9.98			
TPH by SW8015 Mod	Extracted:	09.24.2020 16:30	09.24.2020 16:30	09.24.2020 16:30			
	Analyzed:	09.25.2020 01:57	09.25.2020 02:17	09.25.2020 02:37			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.3 50.3	<50.3 50.3			
Diesel Range Organics (DRO)		<49.8 49.8	<50.3 50.3	<50.3 50.3			
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.3 50.3	<50.3 50.3			
Total GRO-DRO		<49.8 49.8	<50.3 50.3	<50.3 50.3			
Total TPH		<49.8 49.8	<50.3 50.3	<50.3 50.3			

BRL - Below Reporting Limit

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



Analytical Report 673428

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson 1 Fed Com 008H

012920105

09.28.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.28.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **673428**

Hudson 1 Fed Com 008H

Project Address:

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) 673428. 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. 673428 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,

A handwritten signature in black ink that reads "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

**Sample Cross Reference 673428****LT Environmental, Inc., Arvada, CO**

Hudson 1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	09.21.2020 13:00	0 - 5 ft	673428-001
SW02	S	09.21.2020 13:15	0 - 5 ft	673428-002
SW03	S	09.21.2020 13:30	0 - 5 ft	673428-003
SW04	S	09.21.2020 13:45	0 - 5 ft	673428-004
SW05	S	09.21.2020 14:00	0 - 5 ft	673428-005
SW06	S	09.21.2020 14:15	0 - 5 ft	673428-006
SW07	S	09.21.2020 14:30	0 - 5 ft	673428-007
SW08	S	09.21.2020 14:45	0 - 5 ft	673428-008
SW09	S	09.22.2020 14:30	0 - 2 ft	673428-009
SW10	S	09.22.2020 14:15	0 - 2 ft	673428-010
SW11	S	09.22.2020 14:00	0 - 2 ft	673428-011
SW12	S	09.22.2020 13:45	0 - 2 ft	673428-012
SW13	S	09.22.2020 13:30	0 - 2 ft	673428-013
SW14	S	09.22.2020 15:00	0 - 5 ft	673428-014
SW15	S	09.22.2020 14:45	0 - 5 ft	673428-015



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hudson 1 Fed Com 008H

Project ID: 012920105
Work Order Number(s): 673428

Report Date: 09.28.2020
Date Received: 09.23.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW01** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-001 Date Collected: 09.21.2020 13:00 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	64.5	9.90	mg/kg	09.24.2020 18:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.24.2020 20:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.24.2020 20:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.24.2020 20:54	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	09.24.2020 20:54	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.24.2020 20:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	09.24.2020 20:54	
o-Terphenyl	84-15-1	121	%	70-135	09.24.2020 20:54	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW01**
Lab Sample Id: 673428-001

Matrix: Soil
Date Collected: 09.21.2020 13:00

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.26.2020 06:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 06:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.26.2020 06:02		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.26.2020 06:02		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW02** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-002 Date Collected: 09.21.2020 13:15 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	170	10.0	mg/kg	09.24.2020 18:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.24.2020 21:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.24.2020 21:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.24.2020 21:55	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	09.24.2020 21:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.24.2020 21:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	09.24.2020 21:55	
o-Terphenyl	84-15-1	122	%	70-135	09.24.2020 21:55	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW02**
Lab Sample Id: 673428-002

Matrix: Soil
Date Collected: 09.21.2020 13:15

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.26.2020 06:25	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.26.2020 06:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.26.2020 06:25		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.26.2020 06:25		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW03** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-003 Date Collected: 09.21.2020 13:30 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	397	10.0	mg/kg	09.24.2020 18:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.24.2020 22:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.24.2020 22:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.24.2020 22:15	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.24.2020 22:15	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.24.2020 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	09.24.2020 22:15	
o-Terphenyl	84-15-1	124	%	70-135	09.24.2020 22:15	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW03**
Lab Sample Id: 673428-003

Matrix: Soil
Date Collected: 09.21.2020 13:30

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.26.2020 06:47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.26.2020 06:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	09.26.2020 06:47		
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.26.2020 06:47		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW04** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-004 Date Collected: 09.21.2020 13:45 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	293	9.92	mg/kg	09.24.2020 18:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.24.2020 22:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.24.2020 22:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.24.2020 22:35	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	09.24.2020 22:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.24.2020 22:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	09.24.2020 22:35	
o-Terphenyl	84-15-1	120	%	70-135	09.24.2020 22:35	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW04**
Lab Sample Id: 673428-004

Matrix: Soil
Date Collected: 09.21.2020 13:45

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.26.2020 07:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 07:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.26.2020 07:10		
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.26.2020 07:10		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW05** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-005 Date Collected: 09.21.2020 14:00 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	431	10.1	mg/kg	09.24.2020 18:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.24.2020 22:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.24.2020 22:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.24.2020 22:55	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	09.24.2020 22:55	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.24.2020 22:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	09.24.2020 22:55	
o-Terphenyl	84-15-1	122	%	70-135	09.24.2020 22:55	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW05**
Lab Sample Id: 673428-005

Matrix: Soil
Date Collected: 09.21.2020 14:00

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.26.2020 07:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 07:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.26.2020 07:32		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.26.2020 07:32		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW06** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-006 Date Collected: 09.21.2020 14:15 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.8	10.1	mg/kg	09.24.2020 19:02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.24.2020 23:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.24.2020 23:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.24.2020 23:15	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	09.24.2020 23:15	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.24.2020 23:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	09.24.2020 23:15	
o-Terphenyl	84-15-1	120	%	70-135	09.24.2020 23:15	



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Sample Id: **SW06**
Lab Sample Id: 673428-006

Matrix: Soil
Date Collected: 09.21.2020 14:15

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.26.2020 07:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.26.2020 07:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	09.26.2020 07:55		
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.26.2020 07:55		



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Sample Id: **SW07** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-007 Date Collected: 09.21.2020 14:30 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	191	9.90	mg/kg	09.24.2020 19:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.24.2020 23:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.24.2020 23:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.24.2020 23:35	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	09.24.2020 23:35	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.24.2020 23:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	09.24.2020 23:35	
o-Terphenyl	84-15-1	122	%	70-135	09.24.2020 23:35	



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Sample Id: **SW07**
Lab Sample Id: 673428-007

Matrix: Soil
Date Collected: 09.21.2020 14:30

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 16:43

Basis: Wet Weight

Seq Number: 3138239

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	09.26.2020 08:17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.26.2020 08:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.26.2020 08:17		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.26.2020 08:17		



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Sample Id: **SW08** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-008 Date Collected: 09.21.2020 14:45 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	134	10.0	mg/kg	09.24.2020 19:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.24.2020 23:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.24.2020 23:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.24.2020 23:56	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	09.24.2020 23:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.24.2020 23:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	09.24.2020 23:56	
o-Terphenyl	84-15-1	121	%	70-135	09.24.2020 23:56	



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Sample Id: **SW08**
Lab Sample Id: 673428-008

Matrix: Soil
Date Collected: 09.21.2020 14:45

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.26.2020 04:49	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.26.2020 04:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	09.26.2020 04:49	
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.26.2020 04:49	



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Sample Id: **SW09** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-009 Date Collected: 09.22.2020 14:30 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.7	9.92	mg/kg	09.24.2020 19:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.25.2020 00:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.25.2020 00:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.25.2020 00:16	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	09.25.2020 00:16	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.25.2020 00:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	09.25.2020 00:16	
o-Terphenyl	84-15-1	122	%	70-135	09.25.2020 00:16	



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Sample Id: **SW09**
Lab Sample Id: 673428-009

Matrix: Soil
Date Collected: 09.22.2020 14:30

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.26.2020 05:11	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.26.2020 05:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.26.2020 05:11		
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.26.2020 05:11		



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Sample Id: **SW10** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-010 Date Collected: 09.22.2020 14:15 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	425	10.0	mg/kg	09.24.2020 19:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.25.2020 00:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.25.2020 00:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.25.2020 00:36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	09.25.2020 00:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.25.2020 00:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	09.25.2020 00:36	
o-Terphenyl	84-15-1	118	%	70-135	09.25.2020 00:36	



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Sample Id: **SW10**
Lab Sample Id: 673428-010

Matrix: Soil
Date Collected: 09.22.2020 14:15

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.26.2020 05:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 05:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	09.26.2020 05:34	
4-Bromofluorobenzene	460-00-4	120	%	70-130	09.26.2020 05:34	



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Sample Id: **SW11** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-011 Date Collected: 09.22.2020 14:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	200	9.98	mg/kg	09.24.2020 19:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.25.2020 01:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.25.2020 01:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.25.2020 01:16	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	09.25.2020 01:16	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.25.2020 01:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	09.25.2020 01:16	
o-Terphenyl	84-15-1	118	%	70-135	09.25.2020 01:16	



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Sample Id: **SW11**
Lab Sample Id: 673428-011

Matrix: Soil
Date Collected: 09.22.2020 14:00

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.26.2020 05:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.26.2020 05:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	09.26.2020 05:56		
1,4-Difluorobenzene	540-36-3	104	%	70-130	09.26.2020 05:56		



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Sample Id: **SW12** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-012 Date Collected: 09.22.2020 13:45 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	226	10.0	mg/kg	09.24.2020 19:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.25.2020 01:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.25.2020 01:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.25.2020 01:36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	09.25.2020 01:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.25.2020 01:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	09.25.2020 01:36	
o-Terphenyl	84-15-1	122	%	70-135	09.25.2020 01:36	



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Sample Id: **SW12**
Lab Sample Id: 673428-012

Matrix: Soil
Date Collected: 09.22.2020 13:45

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.26.2020 09:02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.26.2020 09:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.26.2020 09:02		
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.26.2020 09:02		



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Sample Id: **SW13** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-013 Date Collected: 09.22.2020 13:30 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.5	10.1	mg/kg	09.24.2020 19:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.25.2020 01:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.25.2020 01:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.25.2020 01:57	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	09.25.2020 01:57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.25.2020 01:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	09.25.2020 01:57	
o-Terphenyl	84-15-1	115	%	70-135	09.25.2020 01:57	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW13**
Lab Sample Id: 673428-013

Matrix: Soil
Date Collected: 09.22.2020 13:30

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.26.2020 06:41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.26.2020 06:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	125	%	70-130	09.26.2020 06:41		
1,4-Difluorobenzene	540-36-3	104	%	70-130	09.26.2020 06:41		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

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Sample Id: **SW14** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-014 Date Collected: 09.22.2020 15:00 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	222	9.94	mg/kg	09.24.2020 20:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.25.2020 02:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.25.2020 02:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.25.2020 02:17	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	09.25.2020 02:17	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.25.2020 02:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	09.25.2020 02:17	
o-Terphenyl	84-15-1	119	%	70-135	09.25.2020 02:17	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW14**
Lab Sample Id: 673428-014

Matrix: Soil
Date Collected: 09.22.2020 15:00

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.26.2020 07:04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.26.2020 07:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.26.2020 07:04		
4-Bromofluorobenzene	460-00-4	119	%	70-130	09.26.2020 07:04		



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW15** Matrix: Soil Date Received: 09.23.2020 16:40
 Lab Sample Id: 673428-015 Date Collected: 09.22.2020 14:45 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	331	9.98	mg/kg	09.24.2020 20:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.24.2020 16:30 Basis: Wet Weight
 Seq Number: 3138111

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.25.2020 02:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.25.2020 02:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.25.2020 02:37	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	09.25.2020 02:37	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.25.2020 02:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	09.25.2020 02:37	
o-Terphenyl	84-15-1	121	%	70-135	09.25.2020 02:37	



Certificate of Analytical Results 673428

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **SW15**
Lab Sample Id: 673428-015

Matrix: Soil
Date Collected: 09.22.2020 14:45

Date Received: 09.23.2020 16:40
Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.26.2020 07:26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.26.2020 07:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.26.2020 07:26		
4-Bromofluorobenzene	460-00-4	122	%	70-130	09.26.2020 07:26		



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



LT Environmental, Inc.

Hudson 1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3138102

MB Sample Id: 7712042-1-BLK

Matrix: Solid

LCS Sample Id: 7712042-1-BKS

Prep Method: E300P

Date Prep: 09.24.2020

LCSD Sample Id: 7712042-1-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	250	256	102	256	102	90-110	0	20	mg/kg	09.24.2020 18:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3138102

Parent Sample Id: 673428-001

Matrix: Soil

MS Sample Id: 673428-001 S

Prep Method: E300P

Date Prep: 09.24.2020

MSD Sample Id: 673428-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	64.5	201	276	105	278	106	90-110	1	20	mg/kg	09.24.2020 18:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3138102

Parent Sample Id: 673428-011

Matrix: Soil

MS Sample Id: 673428-011 S

Prep Method: E300P

Date Prep: 09.24.2020

MSD Sample Id: 673428-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	200	200	406	103	405	103	90-110	0	20	mg/kg	09.24.2020 19:36	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138111

MB Sample Id: 7712043-1-BLK

Matrix: Solid

LCS Sample Id: 7712043-1-BKS

Prep Method: SW8015P

Date Prep: 09.24.2020

LCSD Sample Id: 7712043-1-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	1080	108	1010	101	70-135	7	35	mg/kg	09.24.2020 20:13	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1020	102	70-135	8	35	mg/kg	09.24.2020 20:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		120		128		70-135	%	09.24.2020 20:13
o-Terphenyl	102		105		100		70-135	%	09.24.2020 20:13

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138111

Matrix: Solid

MB Sample Id: 7712043-1-BLK

Prep Method: SW8015P

Date Prep: 09.24.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.24.2020 19:54	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3138111

Parent Sample Id: 673428-001

Matrix: Soil

MS Sample Id: 673428-001 S

Prep Method: SW8015P

Date Prep: 09.24.2020

MSD Sample Id: 673428-001 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)	<50.0	1000	1070	107	1050	105	70-135	2	35	mg/kg	09.24.2020 21:14	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1040	104	70-135	3	35	mg/kg	09.24.2020 21:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		129		70-135	%	09.24.2020 21:14
o-Terphenyl	128		127		70-135	%	09.24.2020 21:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138238

MB Sample Id: 7712176-1-BLK

Matrix: Solid

LCS Sample Id: 7712176-1-BKS

Prep Method: SW5035A

Date Prep: 09.25.2020

LCSD Sample Id: 7712176-1-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	0.0987	99	0.103	103	70-130	4	35	mg/kg	09.26.2020 02:44	
Toluene	<0.00200	0.100	0.0947	95	0.0973	97	70-130	3	35	mg/kg	09.26.2020 02:44	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.101	101	71-129	3	35	mg/kg	09.26.2020 02:44	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.201	101	70-135	2	35	mg/kg	09.26.2020 02:44	
o-Xylene	<0.00200	0.100	0.0986	99	0.0988	99	71-133	0	35	mg/kg	09.26.2020 02:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		102		70-130	%	09.26.2020 02:44
4-Bromofluorobenzene	115		109		109		70-130	%	09.26.2020 02:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138239

MB Sample Id: 7712177-1-BLK

Matrix: Solid

LCS Sample Id: 7712177-1-BKS

Prep Method: SW5035A

Date Prep: 09.25.2020

LCSD Sample Id: 7712177-1-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	0.104	104	0.115	115	70-130	10	35	mg/kg	09.25.2020 22:35	
Toluene	<0.00200	0.100	0.100	100	0.110	110	70-130	10	35	mg/kg	09.25.2020 22:35	
Ethylbenzene	<0.00200	0.100	0.0933	93	0.102	102	71-129	9	35	mg/kg	09.25.2020 22:35	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.205	103	70-135	9	35	mg/kg	09.25.2020 22:35	
o-Xylene	<0.00200	0.100	0.0933	93	0.101	101	71-133	8	35	mg/kg	09.25.2020 22:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		98		70-130	%	09.25.2020 22:35
4-Bromofluorobenzene	88		90		84		70-130	%	09.25.2020 22:35

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138238

Parent Sample Id: 673428-008

Matrix: Soil

MS Sample Id: 673428-008 S

Prep Method: SW5035A

Date Prep: 09.25.2020

MSD Sample Id: 673428-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.105	105	0.0983	98	70-130	7	35	mg/kg	09.26.2020 03:29	
Toluene	<0.00201	0.100	0.0978	98	0.0878	88	70-130	11	35	mg/kg	09.26.2020 03:29	
Ethylbenzene	<0.00201	0.100	0.105	105	0.0900	90	71-129	15	35	mg/kg	09.26.2020 03:29	
m,p-Xylenes	<0.00402	0.201	0.210	104	0.180	90	70-135	15	35	mg/kg	09.26.2020 03:29	
o-Xylene	<0.00201	0.100	0.104	104	0.0904	90	71-133	14	35	mg/kg	09.26.2020 03:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		96		70-130	%	09.26.2020 03:29
4-Bromofluorobenzene	114		111		70-130	%	09.26.2020 03:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138239

Parent Sample Id: 673399-027

Matrix: Soil

MS Sample Id: 673399-027 S

Prep Method: SW5035A

Date Prep: 09.25.2020

MSD Sample Id: 673399-027 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	0.128	128	0.127	127	70-130	1	35	mg/kg	09.25.2020 23:19	
Toluene	<0.00200	0.100	0.124	124	0.122	122	70-130	2	35	mg/kg	09.25.2020 23:19	
Ethylbenzene	<0.00200	0.100	0.115	115	0.113	113	71-129	2	35	mg/kg	09.25.2020 23:19	
m,p-Xylenes	<0.00400	0.200	0.232	116	0.228	114	70-135	2	35	mg/kg	09.25.2020 23:19	
o-Xylene	<0.00200	0.100	0.113	113	0.112	112	71-133	1	35	mg/kg	09.25.2020 23:19	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		70-130	%	09.25.2020 23:19
4-Bromofluorobenzene	89		95		70-130	%	09.25.2020 23:19

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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: 673428

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)

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

Project Name:	Hudson 1 Fed Com 008H	Turn Around	
Project Number:	012920105	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☐ No ☒
Temperature (°C):	11.8/11.6	Thermometer ID	99120
Received Intact:	Yes ☒ No ☐	Correction Factor:	-0.2
Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:	15
Sample Custody Seals:	Yes ☒ No ☐		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST										Work Order Notes
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)							
SW01	S	9/21/2020	1300	0-5'	1	X	X	X							
SW02	S	9/21/2020	1315	0-5'	1	X	X	X							
SW03	S	9/21/2020	1330	0-5'	1	X	X	X							
SW04	S	9/21/2020	1345	0-5'	1	X	X	X							
SW05	S	9/21/2020	1400	0-5'	1	X	X	X							
SW06	S	9/21/2020	1415	0-5'	1	X	X	X							
SW07	S	9/21/2020	1430	0-5'	1	X	X	X							
SW08	S	9/21/2020	1445	0-5'	1	X	X	X							
SW09	S	9/22/2020	1430	0-2'	1	X	X	X							
SW10	S	9/22/2020	1415	0-2'	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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
		9-23-20 16:46			



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1295
 Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No: 1673428

www.xenco.com Page 2 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Little
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@xenco.com, dmoir@xenco.com, kennedy@xenco.com

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

Project Name:	Hudson 1 Fed Com 008H	Turn Around	☒ Routine ☐ Rush
Project Number:	012920105	Due Date:	
P.O. Number:			
Sampler's Name:	Spencer Lo		

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Well log:	☒ Yes ☐ No
Temperature (°C):	11.8 / 11.0	Thermometer ID:	5.8 / 5.6	1-DM-007	
Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	15		
Sample Custody Seals:	☒ Yes ☐ No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)								
SW11	S	9/22/2020	1400	0-2'	1	X	X	X								
SW12	S	9/22/2020	1345	0-2'	1	X	X	X								
SW13	S	9/22/2020	1330	0-2'	1	X	X	X								
SW14	S	9/22/2020	1500	0-5'	1	X	X	X								
SW15	S	9/22/2020	1445	0-5'	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	7-23-20 16:45			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 09.23.2020 04.40.00 PM

Work Order #: 673428

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)?	5.6
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 09.24.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.25.2020

Certificate of Analysis Summary 674823



LT Environmental, Inc., Arvada, CO

Project Name: Hudson #1 Fed Com 008H

Project Id: 012920105

Date Received in Lab: Fri 10.09.2020 13:40

Contact: Dan Moir

Report Date: 10.14.2020 13:39

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	674823-001	674823-002				
	Field Id:	PH03	PH03 A				
	Depth:	7- ft	9- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	10.08.2020 12:35	10.08.2020 12:45				
BTEX by EPA 8021B	Extracted:	10.12.2020 13:55	10.09.2020 18:41				
	Analyzed:	10.12.2020 19:12	10.10.2020 06:48				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00201 0.00201	<0.00199 0.00199				
Benzene		<0.00201 0.00201	<0.00199 0.00199				
Toluene		<0.00201 0.00201	<0.00199 0.00199				
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199				
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398				
o-Xylene		<0.00201 0.00201	<0.00199 0.00199				
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199				
Total BTEX		<0.00201 0.00201	<0.00199 0.00199				
Chloride by EPA 300	Extracted:	10.09.2020 16:36	10.09.2020 16:36				
	Analyzed:	10.09.2020 19:02	10.09.2020 19:19				
	Units/RL:	mg/kg RL	mg/kg RL				
		1080 50.4	735 10.1				
Chloride							
TPH by SW8015 Mod	Extracted:	10.12.2020 12:00	10.09.2020 17:30				
	Analyzed:	10.12.2020 18:28	10.10.2020 07:11				
	Units/RL:	mg/kg RL	mg/kg RL				
		<50.2 50.2	<49.8 49.8				
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8				
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8				
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8				
Total GRO-DRO		<50.2 50.2	<49.8 49.8				
Total TPH		<50.2 50.2	<49.8 49.8				

BRL - Below Reporting Limit

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



Analytical Report 674823

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson #1 Fed Com 008H

012920105

10.14.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.14.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **674823**

Hudson #1 Fed Com 008H

Project Address:

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) 674823. 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. 674823 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,

A handwritten signature in black ink that reads "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



Sample Cross Reference 674823

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH03	S	10.08.2020 12:35	7 ft	674823-001
PH03 A	S	10.08.2020 12:45	9 ft	674823-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hudson #1 Fed Com 008H

Project ID: 012920105
Work Order Number(s): 674823

Report Date: 10.14.2020
Date Received: 10.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 674823

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH03**
Lab Sample Id: 674823-001

Matrix: Soil
Date Collected: 10.08.2020 12:35

Date Received: 10.09.2020 13:40
Sample Depth: 7 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1080	50.4	mg/kg	10.09.2020 19:02		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.12.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139524

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.12.2020 18:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.12.2020 18:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.12.2020 18:28	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.12.2020 18:28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.12.2020 18:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	10.12.2020 18:28	
o-Terphenyl	84-15-1	103	%	70-135	10.12.2020 18:28	



Certificate of Analytical Results 674823

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH03**
Lab Sample Id: 674823-001

Matrix: Soil
Date Collected: 10.08.2020 12:35

Date Received: 10.09.2020 13:40
Sample Depth: 7 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.12.2020 13:55

% Moisture:
Basis: Wet Weight

Seq Number: 3139520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.12.2020 19:12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.12.2020 19:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	10.12.2020 19:12		
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.12.2020 19:12		



Certificate of Analytical Results 674823

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH03 A**
Lab Sample Id: 674823-002

Matrix: Soil
Date Collected: 10.08.2020 12:45

Date Received: 10.09.2020 13:40
Sample Depth: 9 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	735	10.1	mg/kg	10.09.2020 19:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.10.2020 07:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.10.2020 07:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.10.2020 07:11	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.10.2020 07:11	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.10.2020 07:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.10.2020 07:11	
o-Terphenyl	84-15-1	84	%	70-135	10.10.2020 07:11	



Certificate of Analytical Results 674823

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH03 A**
Lab Sample Id: 674823-002

Matrix: Soil
Date Collected: 10.08.2020 12:45

Date Received: 10.09.2020 13:40
Sample Depth: 9 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.2020 06:48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.2020 06:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.10.2020 06:48	
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.10.2020 06:48	



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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

MB Sample Id: 7713002-1-BLK

Matrix: Solid

LCS Sample Id: 7713002-1-BKS

Prep Method: E300P

Date Prep: 10.09.2020

LCSD Sample Id: 7713002-1-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	250	262	105	264	106	90-110	1	20	mg/kg	10.09.2020 17:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

Parent Sample Id: 674817-001

Matrix: Soil

MS Sample Id: 674817-001 S

Prep Method: E300P

Date Prep: 10.09.2020

MSD Sample Id: 674817-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	51.2	200	259	104	261	105	90-110	1	20	mg/kg	10.09.2020 17:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

Parent Sample Id: 674822-001

Matrix: Soil

MS Sample Id: 674822-001 S

Prep Method: E300P

Date Prep: 10.09.2020

MSD Sample Id: 674822-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5080	202	5290	104	5300	110	90-110	0	20	mg/kg	10.09.2020 18:46	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

MB Sample Id: 7713050-1-BLK

Matrix: Solid

LCS Sample Id: 7713050-1-BKS

Prep Method: SW8015P

Date Prep: 10.09.2020

LCSD Sample Id: 7713050-1-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	888	89	817	82	70-135	8	35	mg/kg	10.12.2020 10:23	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	917	92	70-135	15	35	mg/kg	10.12.2020 10:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		109		113		70-135	%	10.12.2020 10:23
o-Terphenyl	119		99		88		70-135	%	10.12.2020 10:23

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139524

MB Sample Id: 7713127-1-BLK

Matrix: Solid

LCS Sample Id: 7713127-1-BKS

Prep Method: SW8015P

Date Prep: 10.12.2020

LCSD Sample Id: 7713127-1-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	974	97	975	98	70-135	0	35	mg/kg	10.12.2020 16:07	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1080	108	70-135	0	35	mg/kg	10.12.2020 16:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		121		119		70-135	%	10.12.2020 16:07
o-Terphenyl	129		108		109		70-135	%	10.12.2020 16:07

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.09.2020

MB Sample Id: 7713050-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.12.2020 13:43	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139524

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.12.2020

MB Sample Id: 7713127-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.12.2020 15:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.09.2020

Parent Sample Id: 674817-002

MS Sample Id: 674817-002 S

MSD Sample Id: 674817-002 SD

Parameter

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)	<50.2	1000	849	85	827	83	70-135	3	35	mg/kg	10.12.2020 11:42	
Diesel Range Organics (DRO)	<50.2	1000	953	95	929	93	70-135	3	35	mg/kg	10.12.2020 11:42	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		89		70-135	%	10.12.2020 11:42
o-Terphenyl	72		73		70-135	%	10.12.2020 11:42

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139524

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.12.2020

Parent Sample Id: 674819-003

MS Sample Id: 674819-003 S

MSD Sample Id: 674819-003 SD

Parameter

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	998	1020	102	1010	100	70-135	1	35	mg/kg	10.12.2020 17:08	
Diesel Range Organics (DRO)	<49.9	998	1120	112	1150	114	70-135	3	35	mg/kg	10.12.2020 17:08	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		120		70-135	%	10.12.2020 17:08
o-Terphenyl	106		108		70-135	%	10.12.2020 17:08

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139372

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.09.2020

MB Sample Id: 7713005-1-BLK

LCS Sample Id: 7713005-1-BKS

LCSD Sample Id: 7713005-1-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	0.101	101	0.0992	99	70-130	2	35	mg/kg	10.09.2020 22:54	
Toluene	<0.00200	0.100	0.0928	93	0.0929	93	70-130	0	35	mg/kg	10.09.2020 22:54	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.0970	97	71-129	3	35	mg/kg	10.09.2020 22:54	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.198	99	70-135	3	35	mg/kg	10.09.2020 22:54	
o-Xylene	<0.00200	0.100	0.0981	98	0.0980	98	71-133	0	35	mg/kg	10.09.2020 22:54	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	103		100		102		70-130			%	10.09.2020 22:54	
4-Bromofluorobenzene	114		107		110		70-130			%	10.09.2020 22:54	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139520

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.12.2020

MB Sample Id: 7713099-1-BLK

LCS Sample Id: 7713099-1-BKS

LCSD Sample Id: 7713099-1-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	0.0997	100	0.107	107	70-130	7	35	mg/kg	10.12.2020 15:06	
Toluene	<0.00200	0.100	0.0966	97	0.103	103	70-130	6	35	mg/kg	10.12.2020 15:06	
Ethylbenzene	<0.00200	0.100	0.0894	89	0.0953	95	71-129	6	35	mg/kg	10.12.2020 15:06	
m,p-Xylenes	<0.00400	0.200	0.181	91	0.193	97	70-135	6	35	mg/kg	10.12.2020 15:06	
o-Xylene	<0.00200	0.100	0.0890	89	0.0947	95	71-133	6	35	mg/kg	10.12.2020 15:06	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	98		96		97		70-130			%	10.12.2020 15:06	
4-Bromofluorobenzene	84		87		83		70-130			%	10.12.2020 15:06	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139372

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.09.2020

Parent Sample Id: 674817-001

MS Sample Id: 674817-001 S

MSD Sample Id: 674817-001 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	0.0998	0.105	105	0.111	111	70-130	6	35	mg/kg	10.09.2020 23:39	
Toluene	<0.00200	0.0998	0.0976	98	0.103	103	70-130	5	35	mg/kg	10.09.2020 23:39	
Ethylbenzene	<0.00200	0.0998	0.101	101	0.107	107	71-129	6	35	mg/kg	10.09.2020 23:39	
m,p-Xylenes	<0.00399	0.200	0.205	103	0.216	108	70-135	5	35	mg/kg	10.09.2020 23:39	
o-Xylene	<0.00200	0.0998	0.102	102	0.107	107	71-133	5	35	mg/kg	10.09.2020 23:39	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			97		99		70-130			%	10.09.2020 23:39	
4-Bromofluorobenzene			109		110		70-130			%	10.09.2020 23:39	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139520

Parent Sample Id: 674823-001

Matrix: Soil

MS Sample Id: 674823-001 S

Prep Method: SW5035A

Date Prep: 10.12.2020

MSD Sample Id: 674823-001 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	0.0998	0.112	112	0.101	101	70-130	10	35	mg/kg	10.12.2020 15:51	
Toluene	<0.00200	0.0998	0.110	110	0.0975	98	70-130	12	35	mg/kg	10.12.2020 15:51	
Ethylbenzene	<0.00200	0.0998	0.102	102	0.0902	91	71-129	12	35	mg/kg	10.12.2020 15:51	
m,p-Xylenes	<0.00399	0.200	0.205	103	0.181	91	70-135	12	35	mg/kg	10.12.2020 15:51	
o-Xylene	<0.00200	0.0998	0.102	102	0.0888	89	71-133	14	35	mg/kg	10.12.2020 15:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	10.12.2020 15:51
4-Bromofluorobenzene	85		87		70-130	%	10.12.2020 15:51

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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: 634823

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 Litrell
Company Name:	LT Environmental Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@ltenv.com, dmoir@ltenv.com, kkenedy@ltenv.com

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:	Hudson #1 Fed Com 008H	Turn Around	ANALYSIS REQUEST										Work Order Notes
Project Number:	012920105	Routine											
P.O. Number:		Rush:											
Sampler's Name:	Spencer Lo	Due Date:											

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No	Thermometer ID		Correction Factor:		Total Containers:	
Temperature (°C):	2.6/2.4	Received Intact:	Yes	No				T-M-003		-0.2			
Cooler Custody Seals:	Yes	No	N/A										
Sample Custody Seals:	Yes	No	N/A										

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments	
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)									
PH03	S	10/8/2020	1235	7'	1	X	X	X								
PH03A	S	10/8/2020	1245	9'	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions 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 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
		10-9-20 1348			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10.09.2020 01.40.00 PM

Work Order #: 674823

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)?	2.4
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 10.09.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.12.2020

Certificate of Analysis Summary 674825



LT Environmental, Inc., Arvada, CO

Project Name: Hudson #1 Fed Com 008H

Project Id: 012920105

Date Received in Lab: Fri 10.09.2020 13:40

Contact: Dan Moir

Report Date: 10.12.2020 16:34

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674825-001	674825-002	674825-003	674825-004	674825-005	674825-006
	<i>Field Id:</i>	PH01	PH01 A	PH01 B	PH01 C	PH01 D	PH01 E
	<i>Depth:</i>	2- ft	4- ft	6- ft	8- ft	10- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.08.2020 10:00	10.08.2020 10:10	10.08.2020 10:20	10.08.2020 10:30	10.08.2020 10:40	10.08.2020 10:50
BTEX by EPA 8021B	<i>Extracted:</i>	10.09.2020 18:41	10.09.2020 18:41	10.09.2020 18:41	10.09.2020 18:41	10.09.2020 18:41	10.09.2020 18:41
	<i>Analyzed:</i>	10.10.2020 07:10	10.10.2020 07:33	10.10.2020 07:55	10.10.2020 08:17	10.10.2020 08:40	10.10.2020 09:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	10.09.2020 16:36	10.09.2020 16:36	10.09.2020 16:36	10.09.2020 16:36	10.09.2020 16:36	10.09.2020 16:36
	<i>Analyzed:</i>	10.09.2020 19:24	10.09.2020 19:30	10.09.2020 19:35	10.09.2020 19:40	10.09.2020 19:46	10.09.2020 19:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		429 9.98	593 9.92	46.6 9.96	46.8 9.98	169 9.98	235 9.96
TPH by SW8015 Mod	<i>Extracted:</i>	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30	10.09.2020 17:30
	<i>Analyzed:</i>	10.10.2020 06:50	10.10.2020 06:30	10.10.2020 06:10	10.10.2020 05:28	10.10.2020 05:08	10.10.2020 04:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.0 50.0
Total GRO-DRO		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.0 50.0
Total TPH		<50.2 50.2	<49.8 49.8	<50.2 50.2	<50.1 50.1	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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



Analytical Report 674825

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson #1 Fed Com 008H

012920105

10.12.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.12.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **674825**

Hudson #1 Fed Com 008H

Project Address:

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) 674825. 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. 674825 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,

A handwritten signature in black ink that reads "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

**Sample Cross Reference 674825****LT Environmental, Inc., Arvada, CO**

Hudson #1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	10.08.2020 10:00	2 ft	674825-001
PH01 A	S	10.08.2020 10:10	4 ft	674825-002
PH01 B	S	10.08.2020 10:20	6 ft	674825-003
PH01 C	S	10.08.2020 10:30	8 ft	674825-004
PH01 D	S	10.08.2020 10:40	10 ft	674825-005
PH01 E	S	10.08.2020 10:50	12 ft	674825-006



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Hudson #1 Fed Com 008H

Project ID: 012920105
Work Order Number(s): 674825

Report Date: 10.12.2020
Date Received: 10.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01**
Lab Sample Id: 674825-001

Matrix: Soil
Date Collected: 10.08.2020 10:00

Date Received: 10.09.2020 13:40
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	429	9.98	mg/kg	10.09.2020 19:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.10.2020 06:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.10.2020 06:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.10.2020 06:50	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.10.2020 06:50	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.10.2020 06:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	10.10.2020 06:50	
o-Terphenyl	84-15-1	108	%	70-135	10.10.2020 06:50	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01**
Lab Sample Id: 674825-001

Matrix: Soil
Date Collected: 10.08.2020 10:00

Date Received: 10.09.2020 13:40
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.10.2020 07:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.10.2020 07:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.10.2020 07:10		
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.10.2020 07:10		



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 A**
Lab Sample Id: 674825-002

Matrix: Soil
Date Collected: 10.08.2020 10:10

Date Received: 10.09.2020 13:40
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	593	9.92	mg/kg	10.09.2020 19:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.10.2020 06:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.10.2020 06:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.10.2020 06:30	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.10.2020 06:30	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.10.2020 06:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.10.2020 06:30	
o-Terphenyl	84-15-1	85	%	70-135	10.10.2020 06:30	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 A**
Lab Sample Id: 674825-002

Matrix: Soil
Date Collected: 10.08.2020 10:10

Date Received: 10.09.2020 13:40
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.2020 07:33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.2020 07:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.10.2020 07:33	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.10.2020 07:33	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 B**
Lab Sample Id: 674825-003

Matrix: Soil
Date Collected: 10.08.2020 10:20

Date Received: 10.09.2020 13:40
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.6	9.96	mg/kg	10.09.2020 19:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.10.2020 06:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.10.2020 06:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.10.2020 06:10	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.10.2020 06:10	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.10.2020 06:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.10.2020 06:10	
o-Terphenyl	84-15-1	82	%	70-135	10.10.2020 06:10	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 B**
Lab Sample Id: 674825-003

Matrix: Soil
Date Collected: 10.08.2020 10:20

Date Received: 10.09.2020 13:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.2020 07:55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.2020 07:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.10.2020 07:55		
1,4-Difluorobenzene	540-36-3	111	%	70-130	10.10.2020 07:55		



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 C**
Lab Sample Id: 674825-004

Matrix: Soil
Date Collected: 10.08.2020 10:30

Date Received: 10.09.2020 13:40
Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.8	9.98	mg/kg	10.09.2020 19:40		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.10.2020 05:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.10.2020 05:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.10.2020 05:28	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.10.2020 05:28	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.10.2020 05:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.10.2020 05:28	
o-Terphenyl	84-15-1	97	%	70-135	10.10.2020 05:28	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 C**
Lab Sample Id: 674825-004

Matrix: Soil
Date Collected: 10.08.2020 10:30

Date Received: 10.09.2020 13:40
Sample Depth: 8 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.2020 08:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.2020 08:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.10.2020 08:17	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.10.2020 08:17	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 D**
Lab Sample Id: 674825-005

Matrix: Soil
Date Collected: 10.08.2020 10:40

Date Received: 10.09.2020 13:40
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 16:36

% Moisture:
Basis: Wet Weight

Seq Number: 3139363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	169	9.98	mg/kg	10.09.2020 19:46		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

Analyst: DTH

Date Prep: 10.09.2020 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3139408

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.10.2020 05:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.10.2020 05:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.10.2020 05:08	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.10.2020 05:08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.10.2020 05:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	10.10.2020 05:08	
o-Terphenyl	84-15-1	105	%	70-135	10.10.2020 05:08	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 D**
Lab Sample Id: 674825-005

Matrix: Soil
Date Collected: 10.08.2020 10:40

Date Received: 10.09.2020 13:40
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.10.2020 08:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.10.2020 08:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.10.2020 08:40		
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.10.2020 08:40		



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 E** Matrix: Soil Date Received: 10.09.2020 13:40
 Lab Sample Id: 674825-006 Date Collected: 10.08.2020 10:50 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.09.2020 16:36 % Moisture:
 Seq Number: 3139363 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	235	9.96	mg/kg	10.09.2020 19:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.09.2020 17:30 % Moisture:
 Seq Number: 3139408 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.10.2020 04:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.10.2020 04:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.10.2020 04:47	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.10.2020 04:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.10.2020 04:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	10.10.2020 04:47	
o-Terphenyl	84-15-1	86	%	70-135	10.10.2020 04:47	



Certificate of Analytical Results 674825

LT Environmental, Inc., Arvada, CO

Hudson #1 Fed Com 008H

Sample Id: **PH01 E**
Lab Sample Id: 674825-006

Matrix: Soil
Date Collected: 10.08.2020 10:50

Date Received: 10.09.2020 13:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.09.2020 18:41

% Moisture:
Basis: Wet Weight

Seq Number: 3139372

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.10.2020 09:02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.10.2020 09:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	10.10.2020 09:02		
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.10.2020 09:02		



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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

MB Sample Id: 7713002-1-BLK

Matrix: Solid

LCS Sample Id: 7713002-1-BKS

Prep Method: E300P

Date Prep: 10.09.2020

LCSD Sample Id: 7713002-1-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	250	262	105	264	106	90-110	1	20	mg/kg	10.09.2020 17:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

Parent Sample Id: 674817-001

Matrix: Soil

MS Sample Id: 674817-001 S

Prep Method: E300P

Date Prep: 10.09.2020

MSD Sample Id: 674817-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	51.2	200	259	104	261	105	90-110	1	20	mg/kg	10.09.2020 17:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3139363

Parent Sample Id: 674822-001

Matrix: Soil

MS Sample Id: 674822-001 S

Prep Method: E300P

Date Prep: 10.09.2020

MSD Sample Id: 674822-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5080	202	5290	104	5300	110	90-110	0	20	mg/kg	10.09.2020 18:46	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

MB Sample Id: 7713050-1-BLK

Matrix: Solid

LCS Sample Id: 7713050-1-BKS

Prep Method: SW8015P

Date Prep: 10.09.2020

LCSD Sample Id: 7713050-1-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	888	89	817	82	70-135	8	35	mg/kg	10.12.2020 10:23	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	917	92	70-135	15	35	mg/kg	10.12.2020 10:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		109		113		70-135	%	10.12.2020 10:23
o-Terphenyl	119		99		88		70-135	%	10.12.2020 10:23

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

Matrix: Solid

MB Sample Id: 7713050-1-BLK

Prep Method: SW8015P

Date Prep: 10.09.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.12.2020 13:43	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson #1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139408

Parent Sample Id: 674817-002

Matrix: Soil

MS Sample Id: 674817-002 S

Prep Method: SW8015P

Date Prep: 10.09.2020

MSD Sample Id: 674817-002 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)	<50.2	1000	849	85	827	83	70-135	3	35	mg/kg	10.12.2020 11:42	
Diesel Range Organics (DRO)	<50.2	1000	953	95	929	93	70-135	3	35	mg/kg	10.12.2020 11:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		89		70-135	%	10.12.2020 11:42
o-Terphenyl	72		73		70-135	%	10.12.2020 11:42

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139372

MB Sample Id: 7713005-1-BLK

Matrix: Solid

LCS Sample Id: 7713005-1-BKS

Prep Method: SW5035A

Date Prep: 10.09.2020

LCSD Sample Id: 7713005-1-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	0.101	101	0.0992	99	70-130	2	35	mg/kg	10.09.2020 22:54	
Toluene	<0.00200	0.100	0.0928	93	0.0929	93	70-130	0	35	mg/kg	10.09.2020 22:54	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.0970	97	71-129	3	35	mg/kg	10.09.2020 22:54	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.198	99	70-135	3	35	mg/kg	10.09.2020 22:54	
o-Xylene	<0.00200	0.100	0.0981	98	0.0980	98	71-133	0	35	mg/kg	10.09.2020 22:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		100		102		70-130	%	10.09.2020 22:54
4-Bromofluorobenzene	114		107		110		70-130	%	10.09.2020 22:54

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139372

Parent Sample Id: 674817-001

Matrix: Soil

MS Sample Id: 674817-001 S

Prep Method: SW5035A

Date Prep: 10.09.2020

MSD Sample Id: 674817-001 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	0.0998	0.105	105	0.111	111	70-130	6	35	mg/kg	10.09.2020 23:39	
Toluene	<0.00200	0.0998	0.0976	98	0.103	103	70-130	5	35	mg/kg	10.09.2020 23:39	
Ethylbenzene	<0.00200	0.0998	0.101	101	0.107	107	71-129	6	35	mg/kg	10.09.2020 23:39	
m,p-Xylenes	<0.00399	0.200	0.205	103	0.216	108	70-135	5	35	mg/kg	10.09.2020 23:39	
o-Xylene	<0.00200	0.0998	0.102	102	0.107	107	71-133	5	35	mg/kg	10.09.2020 23:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		99		70-130	%	10.09.2020 23:39
4-Bromofluorobenzene	109		110		70-130	%	10.09.2020 23:39

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



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

Chain of Custody

Work Order No: 674825

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slao@ltenv.com, dmoir@ltenv.com, kennedy@ltenv.com

Project Name:	Hudson #1 Fed Com 008H	Turn Around	Routine ☒ Rush: ☐
Project Number:	012920105	Due Date:	
P.O. Number:			
Sampler's Name:	Spencer Lo		

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	5-6/2.4	Thermometer ID	7-NM-007		
Received intact:	☒ Yes ☐ No	Correction Factor:	0.0		
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Total Containers:	6		
Sample Custody Seals:	Yes ☐ No ☒ N/A				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Num	TPH	BTEX	Chlor	Sample Comments											
PH01	S	10/8/2020	1000	2'	1	X	X	X												
PH01A	S	10/8/2020	1010	4'	1	X	X	X												
PH01B	S	10/8/2020	1020	6'	1	X	X	X												
PH01C	S	10/8/2020	1030	8'	1	X	X	X												
PH01D	S	10/8/2020	1040	10'	1	X	X	X												
PH01E	S	10/8/2020	1050	12'	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 Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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
		10-9-20 1348			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10.09.2020 01.40.00 PM

Work Order #: 674825

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)?	2.4
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 10.09.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.12.2020

Certificate of Analysis Summary 678527



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: TE012920105

Date Received in Lab: Thu 11.19.2020 15:17

Contact: Dan Moir

Report Date: 11.25.2020 07:23

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	678527-001	678527-002	678527-003	678527-004	678527-005	678527-006
	<i>Field Id:</i>	PH02	PH02 A	PH02 B	PH02 C	PH02 D	PH02 E
	<i>Depth:</i>	6- ft	8- ft	11- ft	13- ft	15- ft	18- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	11.18.2020 12:10	11.18.2020 12:20	11.18.2020 12:30	11.18.2020 12:45	11.18.2020 13:00	11.18.2020 13:15
BTEX by EPA 8021B	<i>Extracted:</i>	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32
	<i>Analyzed:</i>	11.21.2020 07:52	11.21.2020 08:15	11.21.2020 08:37	11.21.2020 09:00	11.21.2020 09:22	11.21.2020 09:45
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00399 0.00399	<0.00397 0.00397	<0.00397 0.00397	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.002010 0.002010	<0.002020 0.002020	<0.002000 0.002000	<0.001980 0.001980	<0.001980 0.001980	<0.001990 0.001990
Total BTEX		<0.002010 0.002010	<0.002020 0.002020	<0.002000 0.002000	<0.001980 0.001980	<0.001980 0.001980	<0.001990 0.001990
Chloride by EPA 300	<i>Extracted:</i>	11.20.2020 15:30	11.20.2020 15:30	11.20.2020 15:30	11.20.2020 15:30	11.20.2020 15:30	11.23.2020 07:59
	<i>Analyzed:</i>	11.21.2020 01:19	11.21.2020 01:24	11.21.2020 01:30	11.21.2020 01:35	11.21.2020 01:40	11.23.2020 15:45
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4500 49.6	16200 200	2790 49.8	3700 49.8	3950 49.9	14900 200
TPH by SW8015 Mod	<i>Extracted:</i>	11.20.2020 10:12	11.20.2020 10:12	11.20.2020 10:12	11.20.2020 10:12	11.20.2020 10:12	11.20.2020 12:00
	<i>Analyzed:</i>	11.20.2020 18:48	11.20.2020 19:10	11.20.2020 19:31	11.20.2020 19:51	11.20.2020 20:11	11.20.2020 21:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.9 49.9	<50.0 50.0	<50.2 50.2	<50.1 50.1	<49.8 49.8
Diesel Range Organics (DRO)		<50.2 50.2	<49.9 49.9	<50.0 50.0	<50.2 50.2	<50.1 50.1	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.9 49.9	<50.0 50.0	<50.2 50.2	<50.1 50.1	<49.8 49.8
Total GRO-DRO		<50.20 50.20	<49.90 49.90	<50.00 50.00	<50.20 50.20	<50.10 50.10	<49.80 49.80
Total TPH		<50.20 50.20	<49.90 49.90	<50.00 50.00	<50.20 50.20	<50.10 50.10	<49.80 49.80

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 678527



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: TE012920105

Date Received in Lab: Thu 11.19.2020 15:17

Contact: Dan Moir

Report Date: 11.25.2020 07:23

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	678527-007	678527-008	678527-009	678527-010	678527-011	678527-012
	<i>Field Id:</i>	PH03 B	PH03 C	PH03 D	PH03 E	PH04	PH04 A
	<i>Depth:</i>	11- ft	13- ft	15- ft	18- ft	2- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	11.18.2020 14:00	11.18.2020 14:15	11.18.2020 14:30	11.18.2020 14:45	11.18.2020 09:40	11.18.2020 09:55
BTEX by EPA 8021B	<i>Extracted:</i>	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32
	<i>Analyzed:</i>	11.21.2020 10:12	11.21.2020 10:29	11.21.2020 10:51	11.21.2020 16:26	11.21.2020 13:05	11.21.2020 13:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00404 0.00404	<0.00403 0.00403	<0.00399 0.00399	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.002000 0.002000	<0.002020 0.002020	<0.002020 0.002020	<0.002000 0.002000	<0.001990 0.001990	<0.002000 0.002000
Total BTEX		<0.002000 0.002000	<0.002020 0.002020	<0.002020 0.002020	<0.002000 0.002000	<0.001990 0.001990	<0.002000 0.002000
Chloride by EPA 300	<i>Extracted:</i>	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59
	<i>Analyzed:</i>	11.23.2020 16:01	11.23.2020 16:06	11.23.2020 16:11	11.23.2020 16:16	11.23.2020 16:32	11.23.2020 16:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1340 49.8	1140 49.8	254 10.1	818 10.1	544 10.1	548 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00
	<i>Analyzed:</i>	11.20.2020 22:51	11.20.2020 23:11	11.20.2020 23:31	11.20.2020 23:52	11.21.2020 00:11	11.21.2020 00:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.8 49.8
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.8 49.8
Total GRO-DRO		<50.10 50.10	<50.10 50.10	<49.80 49.80	<49.90 49.90	<49.80 49.80	<49.80 49.80
Total TPH		<50.10 50.10	<50.10 50.10	<49.80 49.80	<49.90 49.90	<49.80 49.80	<49.80 49.80

BRL - Below Reporting Limit

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Certificate of Analysis Summary 678527



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: TE012920105

Date Received in Lab: Thu 11.19.2020 15:17

Contact: Dan Moir

Report Date: 11.25.2020 07:23

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	678527-013	678527-014	678527-015	678527-016	678527-017	678527-018
	<i>Field Id:</i>	PH04 B	PH04 C	PH04 D	PH05	PH05 A	PH05 B
	<i>Depth:</i>	6- ft	8- ft	10- ft	6- ft	8- ft	11- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	11.18.2020 10:10	11.18.2020 10:25	11.18.2020 10:40	11.18.2020 15:15	11.18.2020 15:50	11.18.2020 16:05
BTEX by EPA 8021B	<i>Extracted:</i>	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32	11.20.2020 17:32
	<i>Analyzed:</i>	11.21.2020 13:49	11.21.2020 14:12	11.21.2020 14:34	11.21.2020 14:57	11.21.2020 15:19	11.21.2020 15:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00403 0.00403	<0.00402 0.00402	<0.00401 0.00401	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.002000 0.002000	<0.002020 0.002020	<0.002010 0.002010	<0.002000 0.002000	<0.002000 0.002000	<0.001990 0.001990
Total BTEX		<0.002000 0.002000	<0.002020 0.002020	<0.002010 0.002010	<0.002000 0.002000	<0.002000 0.002000	<0.001990 0.001990
Chloride by EPA 300	<i>Extracted:</i>	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59
	<i>Analyzed:</i>	11.23.2020 16:42	11.23.2020 16:47	11.23.2020 16:52	11.23.2020 16:58	11.23.2020 17:13	11.23.2020 17:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		511 9.98	551 9.96	498 49.9	131 9.96	19600 199	20600 200
TPH by SW8015 Mod	<i>Extracted:</i>	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00
	<i>Analyzed:</i>	11.21.2020 00:52	11.21.2020 01:12	11.21.2020 01:32	11.21.2020 02:13	11.21.2020 02:33	11.21.2020 02:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.1 50.1	<49.8 49.8	<50.2 50.2	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.1 50.1	<49.8 49.8	<50.2 50.2	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.1 50.1	<49.8 49.8	<50.2 50.2	<49.8 49.8
Total GRO-DRO		<49.90 49.90	<49.80 49.80	<50.10 50.10	<49.80 49.80	<50.20 50.20	<49.80 49.80
Total TPH		<49.90 49.90	<49.80 49.80	<50.10 50.10	<49.80 49.80	<50.20 50.20	<49.80 49.80

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 678527



LT Environmental, Inc., Arvada, CO

Project Name: Hudson 1 Fed Com 008H

Project Id: TE012920105

Date Received in Lab: Thu 11.19.2020 15:17

Contact: Dan Moir

Report Date: 11.25.2020 07:23

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	678527-019	678527-020	678527-021			
	Field Id:	PH05 C	PH05 D	PH05 E			
	Depth:	13- ft	15- ft	18- ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	11.18.2020 16:20	11.18.2020 16:35	11.18.2020 16:50			
BTEX by EPA 8021B	Extracted:	11.20.2020 17:32	11.21.2020 17:04	11.20.2020 10:58			
	Analyzed:	11.21.2020 16:04	11.22.2020 14:11	11.21.2020 03:37			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401			
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Total Xylenes		<0.002000 0.002000	<0.002000 0.002000	<0.002000 0.002000			
Total BTEX		<0.002000 0.002000	<0.002000 0.002000	<0.002000 0.002000			
Chloride by EPA 300	Extracted:	11.23.2020 07:59	11.23.2020 07:59	11.23.2020 07:59			
	Analyzed:	11.23.2020 17:34	11.23.2020 17:39	11.23.2020 17:44			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		25500 201	27400 202	29100 200			
TPH by SW8015 Mod	Extracted:	11.20.2020 12:00	11.20.2020 12:00	11.20.2020 12:00			
	Analyzed:	11.21.2020 03:13	11.21.2020 03:33	11.21.2020 03:53			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<49.8 49.8	<50.3 50.3			
Diesel Range Organics (DRO)		<50.3 50.3	<49.8 49.8	<50.3 50.3			
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<49.8 49.8	<50.3 50.3			
Total GRO-DRO		<50.30 50.30	<49.80 49.80	<50.30 50.30			
Total TPH		<50.30 50.30	<49.80 49.80	<50.30 50.30			

BRL - Below Reporting Limit

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



Analytical Report 678527

for

LT Environmental, Inc.

Project Manager: Dan Moir

Hudson 1 Fed Com 008H

TE012920105

11.25.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.25.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **678527**

Hudson 1 Fed Com 008H

Project Address:

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) 678527. 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. 678527 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,

A handwritten signature in black ink that reads "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

**Sample Cross Reference 678527****LT Environmental, Inc., Arvada, CO**

Hudson 1 Fed Com 008H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH02	S	11.18.2020 12:10	6 ft	678527-001
PH02 A	S	11.18.2020 12:20	8 ft	678527-002
PH02 B	S	11.18.2020 12:30	11 ft	678527-003
PH02 C	S	11.18.2020 12:45	13 ft	678527-004
PH02 D	S	11.18.2020 13:00	15 ft	678527-005
PH02 E	S	11.18.2020 13:15	18 ft	678527-006
PH03 B	S	11.18.2020 14:00	11 ft	678527-007
PH03 C	S	11.18.2020 14:15	13 ft	678527-008
PH03 D	S	11.18.2020 14:30	15 ft	678527-009
PH03 E	S	11.18.2020 14:45	18 ft	678527-010
PH04	S	11.18.2020 09:40	2 ft	678527-011
PH04 A	S	11.18.2020 09:55	4 ft	678527-012
PH04 B	S	11.18.2020 10:10	6 ft	678527-013
PH04 C	S	11.18.2020 10:25	8 ft	678527-014
PH04 D	S	11.18.2020 10:40	10 ft	678527-015
PH05	S	11.18.2020 15:15	6 ft	678527-016
PH05 A	S	11.18.2020 15:50	8 ft	678527-017
PH05 B	S	11.18.2020 16:05	11 ft	678527-018
PH05 C	S	11.18.2020 16:20	13 ft	678527-019
PH05 D	S	11.18.2020 16:35	15 ft	678527-020
PH05 E	S	11.18.2020 16:50	18 ft	678527-021



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *Hudson 1 Fed Com 008H*

Project ID: *TE012920105*
Work Order Number(s): *678527*

Report Date: *11.25.2020*
Date Received: *11.19.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02**
Lab Sample Id: 678527-001

Matrix: Soil
Date Collected: 11.18.2020 12:10

Date Received: 11.19.2020 15:17
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4500	49.6	mg/kg	11.21.2020 01:19		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 10:12

% Moisture:
Basis: Wet Weight

Seq Number: 3142991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.20.2020 18:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.20.2020 18:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.20.2020 18:48	U	1
Total GRO-DRO	PHC628	<50.20	50.20	mg/kg	11.20.2020 18:48	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	11.20.2020 18:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.20.2020 18:48	
o-Terphenyl	84-15-1	106	%	70-135	11.20.2020 18:48	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02**
Lab Sample Id: 678527-001

Matrix: Soil
Date Collected: 11.18.2020 12:10

Date Received: 11.19.2020 15:17
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.21.2020 07:52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.21.2020 07:52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.21.2020 07:52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.21.2020 07:52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.21.2020 07:52	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	11.21.2020 07:52	U	1
Total BTEX		<0.002010	0.002010	mg/kg	11.21.2020 07:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 07:52	
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 07:52	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 A**
Lab Sample Id: 678527-002

Matrix: Soil
Date Collected: 11.18.2020 12:20

Date Received: 11.19.2020 15:17
Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16200	200	mg/kg	11.21.2020 01:24		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 10:12

% Moisture:
Basis: Wet Weight

Seq Number: 3142991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.20.2020 19:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.20.2020 19:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.20.2020 19:10	U	1
Total GRO-DRO	PHC628	<49.90	49.90	mg/kg	11.20.2020 19:10	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	11.20.2020 19:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.20.2020 19:10	
o-Terphenyl	84-15-1	113	%	70-135	11.20.2020 19:10	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 A**
Lab Sample Id: 678527-002

Matrix: Soil
Date Collected: 11.18.2020 12:20

Date Received: 11.19.2020 15:17
Sample Depth: 8 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.21.2020 08:15	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.21.2020 08:15	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.21.2020 08:15	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.21.2020 08:15	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.21.2020 08:15	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	11.21.2020 08:15	U	1
Total BTEX		<0.002020	0.002020	mg/kg	11.21.2020 08:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	11.21.2020 08:15		
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 08:15		



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 B**
Lab Sample Id: 678527-003

Matrix: Soil
Date Collected: 11.18.2020 12:30

Date Received: 11.19.2020 15:17
Sample Depth: 11 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2790	49.8	mg/kg	11.21.2020 01:30		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 10:12

% Moisture:
Basis: Wet Weight

Seq Number: 3142991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.20.2020 19:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.20.2020 19:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.20.2020 19:31	U	1
Total GRO-DRO	PHC628	<50.00	50.00	mg/kg	11.20.2020 19:31	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	11.20.2020 19:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.20.2020 19:31	
o-Terphenyl	84-15-1	107	%	70-135	11.20.2020 19:31	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 B**
Lab Sample Id: 678527-003

Matrix: Soil
Date Collected: 11.18.2020 12:30

Date Received: 11.19.2020 15:17
Sample Depth: 11 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 08:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 08:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 08:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 08:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 08:37	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 08:37	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 08:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 08:37		
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 08:37		



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 C**
Lab Sample Id: 678527-004

Matrix: Soil
Date Collected: 11.18.2020 12:45

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3700	49.8	mg/kg	11.21.2020 01:35		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 10:12

% Moisture:
Basis: Wet Weight

Seq Number: 3142991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.20.2020 19:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.20.2020 19:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.20.2020 19:51	U	1
Total GRO-DRO	PHC628	<50.20	50.20	mg/kg	11.20.2020 19:51	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	11.20.2020 19:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.20.2020 19:51	
o-Terphenyl	84-15-1	114	%	70-135	11.20.2020 19:51	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 C**
Lab Sample Id: 678527-004

Matrix: Soil
Date Collected: 11.18.2020 12:45

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.21.2020 09:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.21.2020 09:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.21.2020 09:00	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	11.21.2020 09:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.21.2020 09:00	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	11.21.2020 09:00	U	1
Total BTEX		<0.001980	0.001980	mg/kg	11.21.2020 09:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.21.2020 09:00		
1,4-Difluorobenzene	540-36-3	105	%	70-130	11.21.2020 09:00		



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 D**
Lab Sample Id: 678527-005

Matrix: Soil
Date Collected: 11.18.2020 13:00

Date Received: 11.19.2020 15:17
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142940

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3950	49.9	mg/kg	11.21.2020 01:40		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 10:12

% Moisture:
Basis: Wet Weight

Seq Number: 3142991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.20.2020 20:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.20.2020 20:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.20.2020 20:11	U	1
Total GRO-DRO	PHC628	<50.10	50.10	mg/kg	11.20.2020 20:11	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.20.2020 20:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.20.2020 20:11	
o-Terphenyl	84-15-1	105	%	70-135	11.20.2020 20:11	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 D**
Lab Sample Id: 678527-005

Matrix: Soil
Date Collected: 11.18.2020 13:00

Date Received: 11.19.2020 15:17
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.21.2020 09:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.21.2020 09:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.21.2020 09:22	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	11.21.2020 09:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.21.2020 09:22	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	11.21.2020 09:22	U	1
Total BTEX		<0.001980	0.001980	mg/kg	11.21.2020 09:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 09:22		
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.21.2020 09:22		



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 E** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-006 Date Collected: 11.18.2020 13:15 Sample Depth: 18 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14900	200	mg/kg	11.23.2020 15:45		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.20.2020 21:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.20.2020 21:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.20.2020 21:51	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.20.2020 21:51	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.20.2020 21:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.20.2020 21:51	
o-Terphenyl	84-15-1	110	%	70-135	11.20.2020 21:51	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH02 E**
Lab Sample Id: 678527-006

Matrix: Soil
Date Collected: 11.18.2020 13:15

Date Received: 11.19.2020 15:17
Sample Depth: 18 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.21.2020 09:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.21.2020 09:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.21.2020 09:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.21.2020 09:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.21.2020 09:45	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.21.2020 09:45	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.21.2020 09:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 09:45	
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 09:45	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 B**
Lab Sample Id: 678527-007

Matrix: Soil
Date Collected: 11.18.2020 14:00

Date Received: 11.19.2020 15:17
Sample Depth: 11 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1340	49.8	mg/kg	11.23.2020 16:01		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.20.2020 22:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.20.2020 22:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.20.2020 22:51	U	1
Total GRO-DRO	PHC628	<50.10	50.10	mg/kg	11.20.2020 22:51	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.20.2020 22:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.20.2020 22:51	
o-Terphenyl	84-15-1	96	%	70-135	11.20.2020 22:51	



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LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH03 B**
 Lab Sample Id: 678527-007

Matrix: Soil
 Date Collected: 11.18.2020 14:00

Date Received: 11.19.2020 15:17
 Sample Depth: 11 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
 Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 10:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 10:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 10:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 10:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 10:12	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 10:12	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 10:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.21.2020 10:12		
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 10:12		



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 C**
Lab Sample Id: 678527-008

Matrix: Soil
Date Collected: 11.18.2020 14:15

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1140	49.8	mg/kg	11.23.2020 16:06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.20.2020 23:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.20.2020 23:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.20.2020 23:11	U	1
Total GRO-DRO	PHC628	<50.10	50.10	mg/kg	11.20.2020 23:11	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.20.2020 23:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.20.2020 23:11	
o-Terphenyl	84-15-1	114	%	70-135	11.20.2020 23:11	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 C**
Lab Sample Id: 678527-008

Matrix: Soil
Date Collected: 11.18.2020 14:15

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.21.2020 10:29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.21.2020 10:29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.21.2020 10:29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.21.2020 10:29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.21.2020 10:29	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	11.21.2020 10:29	U	1
Total BTEX		<0.002020	0.002020	mg/kg	11.21.2020 10:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 10:29	
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.21.2020 10:29	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 D**
Lab Sample Id: 678527-009

Matrix: Soil
Date Collected: 11.18.2020 14:30

Date Received: 11.19.2020 15:17
Sample Depth: 15 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	254	10.1	mg/kg	11.23.2020 16:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.20.2020 23:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.20.2020 23:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.20.2020 23:31	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.20.2020 23:31	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.20.2020 23:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	11.20.2020 23:31	
o-Terphenyl	84-15-1	96	%	70-135	11.20.2020 23:31	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 D**
Lab Sample Id: 678527-009

Matrix: Soil
Date Collected: 11.18.2020 14:30

Date Received: 11.19.2020 15:17
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.21.2020 10:51	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.21.2020 10:51	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.21.2020 10:51	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.21.2020 10:51	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.21.2020 10:51	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	11.21.2020 10:51	U	1
Total BTEX		<0.002020	0.002020	mg/kg	11.21.2020 10:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.21.2020 10:51		
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 10:51		



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 E**
Lab Sample Id: 678527-010

Matrix: Soil
Date Collected: 11.18.2020 14:45

Date Received: 11.19.2020 15:17
Sample Depth: 18 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	818	10.1	mg/kg	11.23.2020 16:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.20.2020 23:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.20.2020 23:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.20.2020 23:52	U	1
Total GRO-DRO	PHC628	<49.90	49.90	mg/kg	11.20.2020 23:52	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	11.20.2020 23:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.20.2020 23:52	
o-Terphenyl	84-15-1	116	%	70-135	11.20.2020 23:52	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH03 E**
Lab Sample Id: 678527-010

Matrix: Soil
Date Collected: 11.18.2020 14:45

Date Received: 11.19.2020 15:17
Sample Depth: 18 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 16:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 16:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 16:26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 16:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 16:26	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 16:26	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 16:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	11.21.2020 16:26		
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 16:26		



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-011 Date Collected: 11.18.2020 09:40 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	544	10.1	mg/kg	11.23.2020 16:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 00:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 00:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 00:11	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 00:11	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 00:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.21.2020 00:11	
o-Terphenyl	84-15-1	114	%	70-135	11.21.2020 00:11	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04**
Lab Sample Id: 678527-011

Matrix: Soil
Date Collected: 11.18.2020 09:40

Date Received: 11.19.2020 15:17
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.21.2020 13:05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.21.2020 13:05	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.21.2020 13:05	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.21.2020 13:05	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.21.2020 13:05	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.21.2020 13:05	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.21.2020 13:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	11.21.2020 13:05		
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.21.2020 13:05		



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04 A**
Lab Sample Id: 678527-012

Matrix: Soil
Date Collected: 11.18.2020 09:55

Date Received: 11.19.2020 15:17
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	548	10.0	mg/kg	11.23.2020 16:37		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 00:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 00:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 00:32	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 00:32	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 00:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.21.2020 00:32	
o-Terphenyl	84-15-1	104	%	70-135	11.21.2020 00:32	



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LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH04 A**
Lab Sample Id: 678527-012

Matrix: Soil
Date Collected: 11.18.2020 09:55

Date Received: 11.19.2020 15:17
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 13:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 13:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 13:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 13:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 13:27	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 13:27	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 13:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 13:27		
4-Bromofluorobenzene	460-00-4	92	%	70-130	11.21.2020 13:27		



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LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH04 B**
Lab Sample Id: 678527-013

Matrix: Soil
Date Collected: 11.18.2020 10:10

Date Received: 11.19.2020 15:17
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	511	9.98	mg/kg	11.23.2020 16:42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.21.2020 00:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.21.2020 00:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.21.2020 00:52	U	1
Total GRO-DRO	PHC628	<49.90	49.90	mg/kg	11.21.2020 00:52	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	11.21.2020 00:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.21.2020 00:52	
o-Terphenyl	84-15-1	106	%	70-135	11.21.2020 00:52	



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Sample Id: **PH04 B**
 Lab Sample Id: 678527-013

Matrix: Soil
 Date Collected: 11.18.2020 10:10

Date Received: 11.19.2020 15:17
 Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
 Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 13:49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 13:49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 13:49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 13:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 13:49	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 13:49	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 13:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	11.21.2020 13:49		
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 13:49		



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Sample Id: **PH04 C**
Lab Sample Id: 678527-014

Matrix: Soil
Date Collected: 11.18.2020 10:25

Date Received: 11.19.2020 15:17
Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	551	9.96	mg/kg	11.23.2020 16:47		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 01:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 01:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 01:12	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 01:12	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 01:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.21.2020 01:12	
o-Terphenyl	84-15-1	116	%	70-135	11.21.2020 01:12	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04 C**
 Lab Sample Id: 678527-014

Matrix: Soil
 Date Collected: 11.18.2020 10:25

Date Received: 11.19.2020 15:17
 Sample Depth: 8 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
 Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.21.2020 14:12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.21.2020 14:12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.21.2020 14:12	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.21.2020 14:12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.21.2020 14:12	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	11.21.2020 14:12	U	1
Total BTEX		<0.002020	0.002020	mg/kg	11.21.2020 14:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.21.2020 14:12		
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 14:12		



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04 D**
Lab Sample Id: 678527-015

Matrix: Soil
Date Collected: 11.18.2020 10:40

Date Received: 11.19.2020 15:17
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	498	49.9	mg/kg	11.23.2020 16:52		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.21.2020 01:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.21.2020 01:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.21.2020 01:32	U	1
Total GRO-DRO	PHC628	<50.10	50.10	mg/kg	11.21.2020 01:32	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	11.21.2020 01:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	11.21.2020 01:32	
o-Terphenyl	84-15-1	98	%	70-135	11.21.2020 01:32	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH04 D**
Lab Sample Id: 678527-015

Matrix: Soil
Date Collected: 11.18.2020 10:40

Date Received: 11.19.2020 15:17
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.21.2020 14:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.21.2020 14:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.21.2020 14:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.21.2020 14:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.21.2020 14:34	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	11.21.2020 14:34	U	1
Total BTEX		<0.002010	0.002010	mg/kg	11.21.2020 14:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 14:34		
4-Bromofluorobenzene	460-00-4	93	%	70-130	11.21.2020 14:34		



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Sample Id: **PH05** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-016 Date Collected: 11.18.2020 15:15 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	131	9.96	mg/kg	11.23.2020 16:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 02:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 02:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 02:13	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 02:13	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 02:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.21.2020 02:13	
o-Terphenyl	84-15-1	112	%	70-135	11.21.2020 02:13	



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Sample Id: **PH05**
Lab Sample Id: 678527-016

Matrix: Soil
Date Collected: 11.18.2020 15:15

Date Received: 11.19.2020 15:17
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 14:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 14:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 14:57	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.21.2020 14:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 14:57	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 14:57	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 14:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.21.2020 14:57		
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 14:57		



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Sample Id: **PH05 A** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-017 Date Collected: 11.18.2020 15:50 Sample Depth: 8 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19600	199	mg/kg	11.23.2020 17:13		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.21.2020 02:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.21.2020 02:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.21.2020 02:33	U	1
Total GRO-DRO	PHC628	<50.20	50.20	mg/kg	11.21.2020 02:33	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	11.21.2020 02:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	11.21.2020 02:33	
o-Terphenyl	84-15-1	94	%	70-135	11.21.2020 02:33	



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Sample Id: **PH05 A**
 Lab Sample Id: 678527-017

Matrix: Soil
 Date Collected: 11.18.2020 15:50

Date Received: 11.19.2020 15:17
 Sample Depth: 8 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
 Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 15:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 15:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 15:19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 15:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 15:19	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 15:19	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 15:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.21.2020 15:19		
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.21.2020 15:19		



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Sample Id: **PH05 B**
Lab Sample Id: 678527-018

Matrix: Soil
Date Collected: 11.18.2020 16:05

Date Received: 11.19.2020 15:17
Sample Depth: 11 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20600	200	mg/kg	11.23.2020 17:18		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 02:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 02:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 02:53	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 02:53	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 02:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.21.2020 02:53	
o-Terphenyl	84-15-1	122	%	70-135	11.21.2020 02:53	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH05 B**
Lab Sample Id: 678527-018

Matrix: Soil
Date Collected: 11.18.2020 16:05

Date Received: 11.19.2020 15:17
Sample Depth: 11 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.21.2020 15:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.21.2020 15:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.21.2020 15:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.21.2020 15:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.21.2020 15:41	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	11.21.2020 15:41	U	1
Total BTEX		<0.001990	0.001990	mg/kg	11.21.2020 15:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.21.2020 15:41		
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.21.2020 15:41		



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Sample Id: **PH05 C**
Lab Sample Id: 678527-019

Matrix: Soil
Date Collected: 11.18.2020 16:20

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 11.23.2020 07:59

% Moisture:
Basis: Wet Weight

Seq Number: 3143166

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25500	201	mg/kg	11.23.2020 17:34		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: MAB

Analyst: CAC

Date Prep: 11.20.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142934

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.21.2020 03:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.21.2020 03:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.21.2020 03:13	U	1
Total GRO-DRO	PHC628	<50.30	50.30	mg/kg	11.21.2020 03:13	U	1
Total TPH	PHC635	<50.30	50.30	mg/kg	11.21.2020 03:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	11.21.2020 03:13	
o-Terphenyl	84-15-1	114	%	70-135	11.21.2020 03:13	



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LT Environmental, Inc., Arvada, CO

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Sample Id: **PH05 C**
Lab Sample Id: 678527-019

Matrix: Soil
Date Collected: 11.18.2020 16:20

Date Received: 11.19.2020 15:17
Sample Depth: 13 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 17:32

% Moisture:
Basis: Wet Weight

Seq Number: 3142996

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 16:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 16:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 16:04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.21.2020 16:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 16:04	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 16:04	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 16:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.21.2020 16:04		
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.21.2020 16:04		



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Sample Id: **PH05 D** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-020 Date Collected: 11.18.2020 16:35 Sample Depth: 15 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27400	202	mg/kg	11.23.2020 17:39		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.21.2020 03:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.21.2020 03:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.21.2020 03:33	U	1
Total GRO-DRO	PHC628	<49.80	49.80	mg/kg	11.21.2020 03:33	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	11.21.2020 03:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.21.2020 03:33	
o-Terphenyl	84-15-1	118	%	70-135	11.21.2020 03:33	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH05 D**
Lab Sample Id: 678527-020

Matrix: Soil
Date Collected: 11.18.2020 16:35

Date Received: 11.19.2020 15:17
Sample Depth: 15 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.21.2020 17:04

% Moisture:
Basis: Wet Weight

Seq Number: 3142998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.22.2020 14:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.22.2020 14:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.22.2020 14:11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.22.2020 14:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.22.2020 14:11	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.22.2020 14:11	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.22.2020 14:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	11.22.2020 14:11		
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.22.2020 14:11		



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH05 E** Matrix: Soil Date Received: 11.19.2020 15:17
 Lab Sample Id: 678527-021 Date Collected: 11.18.2020 16:50 Sample Depth: 18 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.23.2020 07:59 % Moisture:
 Seq Number: 3143166 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29100	200	mg/kg	11.23.2020 17:44		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.20.2020 12:00 % Moisture:
 Seq Number: 3142934 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.21.2020 03:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.21.2020 03:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.21.2020 03:53	U	1
Total GRO-DRO	PHC628	<50.30	50.30	mg/kg	11.21.2020 03:53	U	1
Total TPH	PHC635	<50.30	50.30	mg/kg	11.21.2020 03:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	11.21.2020 03:53	
o-Terphenyl	84-15-1	108	%	70-135	11.21.2020 03:53	



Certificate of Analytical Results 678527

LT Environmental, Inc., Arvada, CO

Hudson 1 Fed Com 008H

Sample Id: **PH05 E**
Lab Sample Id: 678527-021

Matrix: Soil
Date Collected: 11.18.2020 16:50

Date Received: 11.19.2020 15:17
Sample Depth: 18 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.20.2020 10:58

% Moisture:
Basis: Wet Weight

Seq Number: 3142935

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.21.2020 03:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.21.2020 03:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.21.2020 03:37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.21.2020 03:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.21.2020 03:37	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	11.21.2020 03:37	U	1
Total BTEX		<0.002000	0.002000	mg/kg	11.21.2020 03:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.21.2020 03:37		
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.21.2020 03:37		

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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: Chloride by EPA 300

Seq Number: 3142940

MB Sample Id: 7715682-1-BLK

Matrix: Solid

LCS Sample Id: 7715682-1-BKS

Prep Method: E300P

Date Prep: 11.20.2020

LCSD Sample Id: 7715682-1-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	250	253	101	254	102	90-110	0	20	mg/kg	11.20.2020 23:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3143166

MB Sample Id: 7715707-1-BLK

Matrix: Solid

LCS Sample Id: 7715707-1-BKS

Prep Method: E300P

Date Prep: 11.23.2020

LCSD Sample Id: 7715707-1-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	250	245	98	241	96	90-110	2	20	mg/kg	11.23.2020 15:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3142940

Parent Sample Id: 678524-003

Matrix: Soil

MS Sample Id: 678524-003 S

Prep Method: E300P

Date Prep: 11.20.2020

MSD Sample Id: 678524-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	225	199	428	102	427	101	90-110	0	20	mg/kg	11.20.2020 23:25	

Analytical Method: Chloride by EPA 300

Seq Number: 3142940

Parent Sample Id: 678525-010

Matrix: Soil

MS Sample Id: 678525-010 S

Prep Method: E300P

Date Prep: 11.20.2020

MSD Sample Id: 678525-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	44.6	200	250	103	248	102	90-110	1	20	mg/kg	11.21.2020 00:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3143166

Parent Sample Id: 678527-006

Matrix: Soil

MS Sample Id: 678527-006 S

Prep Method: E300P

Date Prep: 11.23.2020

MSD Sample Id: 678527-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14900	199	15100	101	15100	99	90-110	0	20	mg/kg	11.23.2020 15:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3143166

Parent Sample Id: 678527-016

Matrix: Soil

MS Sample Id: 678527-016 S

Prep Method: E300P

Date Prep: 11.23.2020

MSD Sample Id: 678527-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	131	200	331	100	327	99	90-110	1	20	mg/kg	11.23.2020 17:03	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142991

MB Sample Id: 7715674-1-BLK

Matrix: Solid

LCS Sample Id: 7715674-1-BKS

Prep Method: SW8015P

Date Prep: 11.20.2020

LCSD Sample Id: 7715674-1-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	1100	110	957	96	70-135	14	35	mg/kg	11.20.2020 12:06	
Diesel Range Organics (DRO)	<50.0	1000	1170	117	1100	110	70-135	6	35	mg/kg	11.20.2020 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		116		116		70-135	%	11.20.2020 12:06
o-Terphenyl	109		123		109		70-135	%	11.20.2020 12:06

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142934

MB Sample Id: 7715677-1-BLK

Matrix: Solid

LCS Sample Id: 7715677-1-BKS

Prep Method: SW8015P

Date Prep: 11.20.2020

LCSD Sample Id: 7715677-1-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	1210	121	1170	117	70-135	3	35	mg/kg	11.20.2020 21:11	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1050	105	70-135	6	35	mg/kg	11.20.2020 21:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		112		116		70-135	%	11.20.2020 21:11
o-Terphenyl	118		102		111		70-135	%	11.20.2020 21:11

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142991

Matrix: Solid

MB Sample Id: 7715674-1-BLK

Prep Method: SW8015P

Date Prep: 11.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.20.2020 11:46	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142934

Matrix: Solid

MB Sample Id: 7715677-1-BLK

Prep Method: SW8015P

Date Prep: 11.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.20.2020 20:51	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142991

Parent Sample Id: 678524-003

Matrix: Soil

MS Sample Id: 678524-003 S

Prep Method: SW8015P

Date Prep: 11.20.2020

MSD Sample Id: 678524-003 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)	<49.8	996	1110	111	1200	120	70-135	8	35	mg/kg	11.20.2020 13:06	
Diesel Range Organics (DRO)	<49.8	996	1060	106	1110	111	70-135	5	35	mg/kg	11.20.2020 13:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		105		70-135	%	11.20.2020 13:06
o-Terphenyl	106		108		70-135	%	11.20.2020 13:06

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142934

Parent Sample Id: 678527-006

Matrix: Soil

MS Sample Id: 678527-006 S

Prep Method: SW8015P

Date Prep: 11.20.2020

MSD Sample Id: 678527-006 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)	<50.0	1000	1150	115	1110	111	70-135	4	35	mg/kg	11.20.2020 22:11	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	995	100	70-135	10	35	mg/kg	11.20.2020 22:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		107		70-135	%	11.20.2020 22:11
o-Terphenyl	98		112		70-135	%	11.20.2020 22:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142935

MB Sample Id: 7715671-1-BLK

Matrix: Solid

LCS Sample Id: 7715671-1-BKS

Prep Method: SW5035A

Date Prep: 11.20.2020

LCSD Sample Id: 7715671-1-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	0.113	113	0.103	103	70-130	9	35	mg/kg	11.20.2020 17:33	
Toluene	<0.00200	0.100	0.106	106	0.0970	97	70-130	9	35	mg/kg	11.20.2020 17:33	
Ethylbenzene	<0.00200	0.100	0.0969	97	0.0897	90	71-129	8	35	mg/kg	11.20.2020 17:33	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.181	91	70-135	7	35	mg/kg	11.20.2020 17:33	
o-Xylene	<0.00200	0.100	0.0965	97	0.0909	91	71-133	6	35	mg/kg	11.20.2020 17:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		100		100		70-130	%	11.20.2020 17:33
4-Bromofluorobenzene	88		86		85		70-130	%	11.20.2020 17:33

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142996

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.20.2020

MB Sample Id: 7715672-1-BLK

LCS Sample Id: 7715672-1-BKS

LCSD Sample Id: 7715672-1-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	0.109	109	0.109	109	70-130	0	35	mg/kg	11.21.2020 05:50	
Toluene	<0.00200	0.100	0.103	103	0.102	102	70-130	1	35	mg/kg	11.21.2020 05:50	
Ethylbenzene	<0.00200	0.100	0.0939	94	0.0926	93	71-129	1	35	mg/kg	11.21.2020 05:50	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.186	93	70-135	2	35	mg/kg	11.21.2020 05:50	
o-Xylene	<0.00200	0.100	0.0944	94	0.0933	93	71-133	1	35	mg/kg	11.21.2020 05:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		101		99		70-130	%	11.21.2020 05:50
4-Bromofluorobenzene	85		89		86		70-130	%	11.21.2020 05:50

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142998

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.21.2020

MB Sample Id: 7715709-1-BLK

LCS Sample Id: 7715709-1-BKS

LCSD Sample Id: 7715709-1-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	0.0974	97	0.0977	98	70-130	0	35	mg/kg	11.22.2020 07:03	
Toluene	<0.00200	0.100	0.0908	91	0.0909	91	70-130	0	35	mg/kg	11.22.2020 07:03	
Ethylbenzene	<0.00200	0.100	0.0943	94	0.0937	94	71-129	1	35	mg/kg	11.22.2020 07:03	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.192	96	70-135	1	35	mg/kg	11.22.2020 07:03	
o-Xylene	<0.00200	0.100	0.0960	96	0.0963	96	71-133	0	35	mg/kg	11.22.2020 07:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		97		100		70-130	%	11.22.2020 07:03
4-Bromofluorobenzene	115		108		109		70-130	%	11.22.2020 07:03

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142935

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.20.2020

Parent Sample Id: 678524-003

MS Sample Id: 678524-003 S

MSD Sample Id: 678524-003 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	0.0998	0.111	111	0.109	110	70-130	2	35	mg/kg	11.20.2020 18:18	
Toluene	<0.00200	0.0998	0.106	106	0.105	106	70-130	1	35	mg/kg	11.20.2020 18:18	
Ethylbenzene	<0.00200	0.0998	0.0975	98	0.0959	96	71-129	2	35	mg/kg	11.20.2020 18:18	
m,p-Xylenes	<0.00399	0.200	0.198	99	0.194	97	70-135	2	35	mg/kg	11.20.2020 18:18	
o-Xylene	<0.00200	0.0998	0.0971	97	0.0949	95	71-133	2	35	mg/kg	11.20.2020 18:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		70-130	%	11.20.2020 18:18
4-Bromofluorobenzene	82		86		70-130	%	11.20.2020 18:18

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



LT Environmental, Inc.
Hudson 1 Fed Com 008H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142996

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.20.2020

Parent Sample Id: 678527-001

MS Sample Id: 678527-001 S

MSD Sample Id: 678527-001 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	0.0894	89	0.0885	88	70-130	1	35	mg/kg	11.21.2020 06:35	
Toluene	<0.00200	0.100	0.0835	84	0.0848	84	70-130	2	35	mg/kg	11.21.2020 06:35	
Ethylbenzene	<0.00200	0.100	0.0749	75	0.0773	77	71-129	3	35	mg/kg	11.21.2020 06:35	
m,p-Xylenes	<0.00401	0.200	0.152	76	0.157	78	70-135	3	35	mg/kg	11.21.2020 06:35	
o-Xylene	<0.00200	0.100	0.0757	76	0.0778	77	71-133	3	35	mg/kg	11.21.2020 06:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	11.21.2020 06:35
4-Bromofluorobenzene	85		85		70-130	%	11.21.2020 06:35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142998

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.21.2020

Parent Sample Id: 678647-004

MS Sample Id: 678647-004 S

MSD Sample Id: 678647-004 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	0.0841	84	0.0828	83	70-130	2	35	mg/kg	11.22.2020 07:48	
Toluene	<0.00200	0.100	0.0786	79	0.0768	77	70-130	2	35	mg/kg	11.22.2020 07:48	
Ethylbenzene	<0.00200	0.100	0.0813	81	0.0766	77	71-129	6	35	mg/kg	11.22.2020 07:48	
m,p-Xylenes	<0.00401	0.200	0.163	82	0.159	79	70-135	2	35	mg/kg	11.22.2020 07:48	
o-Xylene	<0.00200	0.100	0.0823	82	0.0809	81	71-133	2	35	mg/kg	11.22.2020 07:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		70-130	%	11.22.2020 07:48
4-Bromofluorobenzene	106		104		70-130	%	11.22.2020 07:48

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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



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Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Chain of Custody

Work Order No: 6018524

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slc@ltenv.com, dmoir@ltenv.com, kkennedy@ltenv.com

Work Order Comments	
Program: UST/PST	☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund
State of Project:	
Reporting Level: I	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV
Deliverables: EDD	☐ ADAPT ☐ Other:

Project Name:	Hudson 1 Fed Com 008H	Turn Around
Project Number:	TE012920105	Routine ☒ Rush:
P.O. Number:		Due Date:
Sampler's Name:	Spencer Lo	

SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	21.2	Thermometer ID	TUN-001	
Received In tact:	Yes ☒ No	Correction Factor:	-0.2	
Cooler Custody Seals:	Yes ☒ No	Total Containers:	01	
Sample Custody Seals:	Yes ☒ No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers															
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)													
PH02	S	11/18/2020	1210	6'	X	X	X													
PH02A	S	11/18/2020	1220	8'	X	X	X													
PH02B	S	11/18/2020	1230	11'	X	X	X													
PH02C	S	11/18/2020	1245	13'	X	X	X													
PH02D	S	11/18/2020	1300	15'	X	X	X													
PH02E	S	11/18/2020	1315	18'	X	X	X													
PH03B	S	11/18/2020	1400	11'	X	X	X													
PH03C	S	11/18/2020	1415	13'	X	X	X													
PH03D	S	11/18/2020	1430	15'	X	X	X													
PH03E	S	11/18/2020	1445	18'	X	X	X													

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

BRCPA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: BRCPA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11-19-20 1517			

Revised Date 05/14/18 Rev. 2018.1



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 Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Chain of Custody

Work Order No: 678527

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LI Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	slm@lieniv.com, dmoir@lieniv.com, kkennedy@lieniv.com

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

ANALYSIS REQUEST

Work Order Notes

Project Name:	Hudson 1 Fed Com 008H	Turn Around	
Project Number:	TE012920105	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Thermometer ID				
Received Inact:	Yes	No	Correction Factor:	See Page 1		
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers															
PH04	S	11/18/2020	940	2'	1	X	X	X	X											
PH04A	S	11/18/2020	955	4'	1	X	X	X	X											
PH04B	S	11/18/2020	1010	6'	1	X	X	X	X											
PH04C	S	11/18/2020	1025	8'	1	X	X	X	X											
PH04D	S	11/18/2020	1040	10'	1	X	X	X	X											
PH05	S	11/18/2020	1515	6'	1	X	X	X	X											
PH05A	S	11/18/2020	1550	8'	1	X	X	X	X											
PH05B	S	11/18/2020	1605	11'	1	X	X	X	X											
PH05C	S	11/18/2020	1620	13'	1	X	X	X	X											
PH05D	S	11/18/2020	1635	15'	1	X	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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

Circle Method(s) and Metal(s) to be analyzed

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11/19/20 1517			



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Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-392-7550)
Hobbs, NM (575-392-7550)

Work Order No: 678527

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Chain of Custody

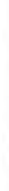
Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	sls@ltenv.com, dmoir@ltenv.com, kkennedy@ltenv.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:			

[illegible]

Total	200.7 / 6010	200.8 / 6020:	Circle Method(s) and Metal(s) to be analyzed																										
8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
TCLP / SPLP	6010:	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U											
			1631 / 245.1 / 7470 / 7471 : Hg																										

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		11.19.2015			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.19.2020 03.17.00 PM

Work Order #: 678527

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)?	2.2
#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
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

*** 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: 11.19.2020

Checklist reviewed by:



Jessica Kramer

Date: 11.20.2020



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-676-1

Laboratory Sample Delivery Group: TE012920106

Client Project/Site: Hudson 1 Fed Com 008H

For:

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

Attn: Dan Moir

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

Authorized for release by:
5/20/2021 1:12:50 PM

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

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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: Hudson 1 Fed Com 008H

Laboratory Job ID: 890-676-1
SDG: TE012920106

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Job ID: 890-676-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-676-1

Comments

No additional comments.

Receipt

The samples were received on 5/17/2021 10:09 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.4° C.

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: FS07 (890-676-7). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS07 (890-676-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-3194 and analytical batch 880-3197 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015B NM: Manual integration was performed on the following sample: FS05 (890-676-5). The oil range detections in these samples was the result of baseline rise and was not an actual indication of oil range hydrocarbons.

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 880-3258 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The associated samples are: FS01 (890-676-1), FS02 (890-676-2), FS03 (890-676-3), FS04 (890-676-4), FS05 (890-676-5), FS06 (890-676-6) and FS07 (890-676-7).

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS01

Lab Sample ID: 890-676-1

Date Collected: 05/13/21 09:48

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/18/21 14:00	05/18/21 18:57	1
Total BTEX	<0.00397	U	0.00397	mg/Kg		05/18/21 14:00	05/18/21 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	05/18/21 14:00	05/18/21 18:57	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/18/21 14:00	05/18/21 18:57	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		05/18/21 11:59	05/18/21 16:13	1
Diesel Range Organics (Over C10-C28)	78.5		49.9	mg/Kg		05/18/21 11:59	05/18/21 16:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/18/21 11:59	05/18/21 16:13	1
Total TPH	78.5		49.9	mg/Kg		05/18/21 11:59	05/18/21 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/18/21 11:59	05/18/21 16:13	1
o-Terphenyl	105		70 - 130	05/18/21 11:59	05/18/21 16:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7850		50.3	mg/Kg			05/19/21 18:49	10

Client Sample ID: FS02

Lab Sample ID: 890-676-2

Date Collected: 05/13/21 09:50

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/18/21 14:00	05/18/21 19:17	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/18/21 14:00	05/18/21 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/18/21 14:00	05/18/21 19:17	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/18/21 14:00	05/18/21 19:17	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS02

Lab Sample ID: 890-676-2

Date Collected: 05/13/21 09:50

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

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		05/18/21 11:59	05/18/21 16:35	1
Diesel Range Organics (Over C10-C28)	66.3		49.9	mg/Kg		05/18/21 11:59	05/18/21 16:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/18/21 11:59	05/18/21 16:35	1
Total TPH	66.3		49.9	mg/Kg		05/18/21 11:59	05/18/21 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/18/21 11:59	05/18/21 16:35	1
o-Terphenyl	107		70 - 130	05/18/21 11:59	05/18/21 16:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	775		4.98	mg/Kg			05/19/21 18:54	1

Client Sample ID: FS03

Lab Sample ID: 890-676-3

Date Collected: 05/13/21 09:54

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/18/21 14:00	05/18/21 19:37	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		05/18/21 14:00	05/18/21 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/18/21 14:00	05/18/21 19:37	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/18/21 14:00	05/18/21 19:37	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		05/18/21 11:59	05/18/21 16:57	1
Diesel Range Organics (Over C10-C28)	596		50.0	mg/Kg		05/18/21 11:59	05/18/21 16:57	1
Oil Range Organics (Over C28-C36)	133		50.0	mg/Kg		05/18/21 11:59	05/18/21 16:57	1
Total TPH	729		50.0	mg/Kg		05/18/21 11:59	05/18/21 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	05/18/21 11:59	05/18/21 16:57	1
o-Terphenyl	102		70 - 130	05/18/21 11:59	05/18/21 16:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4380		24.9	mg/Kg			05/19/21 18:59	5

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS04

Lab Sample ID: 890-676-4

Date Collected: 05/13/21 09:56

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
Toluene	0.00435		0.00202	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
Ethylbenzene	0.00674		0.00202	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
m-Xylene & p-Xylene	0.0169		0.00404	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
o-Xylene	0.0114		0.00202	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
Xylenes, Total	0.0283		0.00404	mg/Kg		05/18/21 14:00	05/18/21 19:58	1
Total BTEX	0.0394		0.00404	mg/Kg		05/18/21 14:00	05/18/21 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/18/21 14:00	05/18/21 19:58	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/18/21 14:00	05/18/21 19:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/18/21 11:59	05/18/21 17:18	1
Diesel Range Organics (Over C10-C28)	1970		50.0	mg/Kg		05/18/21 11:59	05/18/21 17:18	1
Oil Range Organics (Over C28-C36)	391		50.0	mg/Kg		05/18/21 11:59	05/18/21 17:18	1
Total TPH	2360		50.0	mg/Kg		05/18/21 11:59	05/18/21 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/18/21 11:59	05/18/21 17:18	1
o-Terphenyl	104		70 - 130	05/18/21 11:59	05/18/21 17:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13300	F1	101	mg/Kg			05/19/21 19:04	20

Client Sample ID: FS05

Lab Sample ID: 890-676-5

Date Collected: 05/13/21 09:58

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/18/21 14:00	05/18/21 20:18	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		05/18/21 14:00	05/18/21 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	05/18/21 14:00	05/18/21 20:18	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/18/21 14:00	05/18/21 20:18	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS05

Lab Sample ID: 890-676-5

Date Collected: 05/13/21 09:58

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

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		05/18/21 11:59	05/18/21 17:41	1
Diesel Range Organics (Over C10-C28)	67.0		49.9	mg/Kg		05/18/21 11:59	05/18/21 17:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/18/21 11:59	05/18/21 17:41	1
Total TPH	67.0		49.9	mg/Kg		05/18/21 11:59	05/18/21 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	05/18/21 11:59	05/18/21 17:41	1
o-Terphenyl	105		70 - 130	05/18/21 11:59	05/18/21 17:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13600		99.6	mg/Kg			05/19/21 19:20	20

Client Sample ID: FS06

Lab Sample ID: 890-676-6

Date Collected: 05/13/21 10:00

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/18/21 14:00	05/18/21 20:39	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		05/18/21 14:00	05/18/21 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/18/21 14:00	05/18/21 20:39	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/18/21 14:00	05/18/21 20:39	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		05/19/21 08:44	05/19/21 19:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/19/21 08:44	05/19/21 19:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/19/21 08:44	05/19/21 19:04	1
Total TPH	<49.8	U	49.8	mg/Kg		05/19/21 08:44	05/19/21 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/19/21 08:44	05/19/21 19:04	1
o-Terphenyl	114		70 - 130	05/19/21 08:44	05/19/21 19:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8600		50.0	mg/Kg			05/19/21 19:25	10

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS07

Lab Sample ID: 890-676-7

Date Collected: 05/13/21 10:02

Matrix: Solid

Date Received: 05/17/21 10:09

Sample Depth: - 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/18/21 14:00	05/18/21 20:59	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/18/21 14:00	05/18/21 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130	05/18/21 14:00	05/18/21 20:59	1
1,4-Difluorobenzene (Surr)	88		70 - 130	05/18/21 14:00	05/18/21 20:59	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		05/19/21 08:44	05/19/21 19:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/19/21 08:44	05/19/21 19:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/19/21 08:44	05/19/21 19:25	1
Total TPH	<49.9	U	49.9	mg/Kg		05/19/21 08:44	05/19/21 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	05/19/21 08:44	05/19/21 19:25	1
o-Terphenyl	96		70 - 130	05/19/21 08:44	05/19/21 19:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2280		24.8	mg/Kg			05/19/21 19:41	5

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

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)
890-676-1	FS01	109	100
890-676-2	FS02	113	99
890-676-3	FS03	105	98
890-676-4	FS04	101	91
890-676-5	FS05	122	96
890-676-6	FS06	113	99
890-676-7	FS07	136 S1+	88
LCS 880-3194/1-A	Lab Control Sample	102	96
LCSD 880-3194/2-A	Lab Control Sample Dup	102	97
MB 880-3194/5-A	Method Blank	107	91
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)
890-676-1	FS01	100	105
890-676-2	FS02	103	107
890-676-3	FS03	98	102
890-676-4	FS04	100	104
890-676-5	FS05	99	105
890-676-6	FS06	102	114
890-676-7	FS07	84	96
LCS 880-3210/2-A	Lab Control Sample	102	98
LCS 880-3222/2-A	Lab Control Sample	87	96
LCSD 880-3210/3-A	Lab Control Sample Dup	105	97
LCSD 880-3222/3-A	Lab Control Sample Dup	91	101
MB 880-3210/1-A	Method Blank	112	105
MB 880-3222/1-A	Method Blank	91	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3194/5-A

Matrix: Solid

Analysis Batch: 3197

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3194

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/18/21 08:35	05/18/21 13:13	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/18/21 08:35	05/18/21 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	05/18/21 08:35	05/18/21 13:13	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/18/21 08:35	05/18/21 13:13	1

Lab Sample ID: LCS 880-3194/1-A

Matrix: Solid

Analysis Batch: 3197

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07243		mg/Kg		72	70 - 130
Toluene	0.100	0.08903		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09700		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1973		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09996		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-3194/2-A

Matrix: Solid

Analysis Batch: 3197

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3194

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07261		mg/Kg		73	70 - 130	0	35
Toluene	0.100	0.08635		mg/Kg		86	70 - 130	3	35
Ethylbenzene	0.100	0.09331		mg/Kg		93	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1892		mg/Kg		95	70 - 130	4	35
o-Xylene	0.100	0.09680		mg/Kg		97	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

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

Lab Sample ID: MB 880-3210/1-A

Matrix: Solid

Analysis Batch: 3205

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3210

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		05/18/21 11:59	05/18/21 12:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/18/21 11:59	05/18/21 12:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/18/21 11:59	05/18/21 12:58	1
Total TPH	<50.0	U	50.0	mg/Kg		05/18/21 11:59	05/18/21 12:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	05/18/21 11:59	05/18/21 12:58	1
o-Terphenyl	105		70 - 130	05/18/21 11:59	05/18/21 12:58	1

Lab Sample ID: LCS 880-3210/2-A

Matrix: Solid

Analysis Batch: 3205

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	873.5		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1084		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-3210/3-A

Matrix: Solid

Analysis Batch: 3205

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3210

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	900.4		mg/Kg		90	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1097		mg/Kg		110	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: MB 880-3222/1-A

Matrix: Solid

Analysis Batch: 3224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3222

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		05/19/21 08:44	05/19/21 10:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/19/21 08:44	05/19/21 10:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/19/21 08:44	05/19/21 10:13	1
Total TPH	<50.0	U	50.0	mg/Kg		05/19/21 08:44	05/19/21 10:13	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/19/21 08:44	05/19/21 10:13	1
o-Terphenyl	106		70 - 130	05/19/21 08:44	05/19/21 10:13	1

Lab Sample ID: LCS 880-3222/2-A

Matrix: Solid

Analysis Batch: 3224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	904.4		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1051		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-3222/3-A

Matrix: Solid

Analysis Batch: 3224

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3222

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	888.8		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1109		mg/Kg		111	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	101		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3231/1-A

Matrix: Solid

Analysis Batch: 3258

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			05/19/21 17:36	1

Lab Sample ID: LCS 880-3231/2-A

Matrix: Solid

Analysis Batch: 3258

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	255.0		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-3231/3-A

Matrix: Solid

Analysis Batch: 3258

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	254.5		mg/Kg		102	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-676-4 MS

Matrix: Solid

Analysis Batch: 3258

Client Sample ID: FS04

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13300	F1	5050	17620	F1	mg/Kg		86	90 - 110

Lab Sample ID: 890-676-4 MSD

Matrix: Solid

Analysis Batch: 3258

Client Sample ID: FS04

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13300	F1	5050	17480	F1	mg/Kg		84	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

GC VOA

Prep Batch: 3194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Total/NA	Solid	5035	
890-676-2	FS02	Total/NA	Solid	5035	
890-676-3	FS03	Total/NA	Solid	5035	
890-676-4	FS04	Total/NA	Solid	5035	
890-676-5	FS05	Total/NA	Solid	5035	
890-676-6	FS06	Total/NA	Solid	5035	
890-676-7	FS07	Total/NA	Solid	5035	
MB 880-3194/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3194/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3194/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Total/NA	Solid	8021B	3194
890-676-2	FS02	Total/NA	Solid	8021B	3194
890-676-3	FS03	Total/NA	Solid	8021B	3194
890-676-4	FS04	Total/NA	Solid	8021B	3194
890-676-5	FS05	Total/NA	Solid	8021B	3194
890-676-6	FS06	Total/NA	Solid	8021B	3194
890-676-7	FS07	Total/NA	Solid	8021B	3194
MB 880-3194/5-A	Method Blank	Total/NA	Solid	8021B	3194
LCS 880-3194/1-A	Lab Control Sample	Total/NA	Solid	8021B	3194
LCSD 880-3194/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3194

GC Semi VOA

Analysis Batch: 3205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Total/NA	Solid	8015B NM	3210
890-676-2	FS02	Total/NA	Solid	8015B NM	3210
890-676-3	FS03	Total/NA	Solid	8015B NM	3210
890-676-4	FS04	Total/NA	Solid	8015B NM	3210
890-676-5	FS05	Total/NA	Solid	8015B NM	3210
MB 880-3210/1-A	Method Blank	Total/NA	Solid	8015B NM	3210
LCS 880-3210/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3210
LCSD 880-3210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3210

Prep Batch: 3210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Total/NA	Solid	8015NM Prep	
890-676-2	FS02	Total/NA	Solid	8015NM Prep	
890-676-3	FS03	Total/NA	Solid	8015NM Prep	
890-676-4	FS04	Total/NA	Solid	8015NM Prep	
890-676-5	FS05	Total/NA	Solid	8015NM Prep	
MB 880-3210/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3210/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 3222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-6	FS06	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

GC Semi VOA (Continued)

Prep Batch: 3222 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-3222/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3222/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-6	FS06	Total/NA	Solid	8015B NM	3222
890-676-7	FS07	Total/NA	Solid	8015B NM	3222
MB 880-3222/1-A	Method Blank	Total/NA	Solid	8015B NM	3222
LCS 880-3222/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3222
LCSD 880-3222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3222

HPLC/IC

Leach Batch: 3231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Soluble	Solid	DI Leach	
890-676-2	FS02	Soluble	Solid	DI Leach	
890-676-3	FS03	Soluble	Solid	DI Leach	
890-676-4	FS04	Soluble	Solid	DI Leach	
890-676-5	FS05	Soluble	Solid	DI Leach	
890-676-6	FS06	Soluble	Solid	DI Leach	
890-676-7	FS07	Soluble	Solid	DI Leach	
MB 880-3231/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3231/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3231/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-676-4 MS	FS04	Soluble	Solid	DI Leach	
890-676-4 MSD	FS04	Soluble	Solid	DI Leach	

Analysis Batch: 3258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-676-1	FS01	Soluble	Solid	300.0	3231
890-676-2	FS02	Soluble	Solid	300.0	3231
890-676-3	FS03	Soluble	Solid	300.0	3231
890-676-4	FS04	Soluble	Solid	300.0	3231
890-676-5	FS05	Soluble	Solid	300.0	3231
890-676-6	FS06	Soluble	Solid	300.0	3231
890-676-7	FS07	Soluble	Solid	300.0	3231
MB 880-3231/1-A	Method Blank	Soluble	Solid	300.0	3231
LCS 880-3231/2-A	Lab Control Sample	Soluble	Solid	300.0	3231
LCSD 880-3231/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3231
890-676-4 MS	FS04	Soluble	Solid	300.0	3231
890-676-4 MSD	FS04	Soluble	Solid	300.0	3231

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS01

Lab Sample ID: 890-676-1

Date Collected: 05/13/21 09:48

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 18:57	MR	XEN MID
Total/NA	Prep	8015NM Prep			3210	05/18/21 11:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3205	05/18/21 16:13	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		10	3258	05/19/21 18:49	SC	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-676-2

Date Collected: 05/13/21 09:50

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 19:17	MR	XEN MID
Total/NA	Prep	8015NM Prep			3210	05/18/21 11:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3205	05/18/21 16:35	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		1	3258	05/19/21 18:54	SC	XEN MID

Client Sample ID: FS03

Lab Sample ID: 890-676-3

Date Collected: 05/13/21 09:54

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 19:37	MR	XEN MID
Total/NA	Prep	8015NM Prep			3210	05/18/21 11:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3205	05/18/21 16:57	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		5	3258	05/19/21 18:59	SC	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-676-4

Date Collected: 05/13/21 09:56

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 19:58	MR	XEN MID
Total/NA	Prep	8015NM Prep			3210	05/18/21 11:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3205	05/18/21 17:18	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		20	3258	05/19/21 19:04	SC	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Client Sample ID: FS05

Lab Sample ID: 890-676-5

Date Collected: 05/13/21 09:58

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 20:18	MR	XEN MID
Total/NA	Prep	8015NM Prep			3210	05/18/21 11:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3205	05/18/21 17:41	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		20	3258	05/19/21 19:20	SC	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-676-6

Date Collected: 05/13/21 10:00

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 20:39	MR	XEN MID
Total/NA	Prep	8015NM Prep			3222	05/19/21 08:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3224	05/19/21 19:04	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		10	3258	05/19/21 19:25	SC	XEN MID

Client Sample ID: FS07

Lab Sample ID: 890-676-7

Date Collected: 05/13/21 10:02

Matrix: Solid

Date Received: 05/17/21 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3194	05/18/21 14:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3197	05/18/21 20:59	MR	XEN MID
Total/NA	Prep	8015NM Prep			3222	05/19/21 08:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3224	05/19/21 19:25	AJ	XEN MID
Soluble	Leach	DI Leach			3231	05/19/21 09:31	CH	XEN MID
Soluble	Analysis	300.0		5	3258	05/19/21 19:41	SC	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

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: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Hudson 1 Fed Com 008H

Job ID: 890-676-1
SDG: TE012920106

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-676-1	FS01	Solid	05/13/21 09:48	05/17/21 10:09	- 4
890-676-2	FS02	Solid	05/13/21 09:50	05/17/21 10:09	- 4
890-676-3	FS03	Solid	05/13/21 09:54	05/17/21 10:09	- 4
890-676-4	FS04	Solid	05/13/21 09:56	05/17/21 10:09	- 4
890-676-5	FS05	Solid	05/13/21 09:58	05/17/21 10:09	- 4
890-676-6	FS06	Solid	05/13/21 10:00	05/17/21 10:09	- 4
890-676-7	FS07	Solid	05/13/21 10:02	05/17/21 10:09	- 5



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

Chain of Custody

Work Order No: _____

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

ANALYSIS REQUEST

Work Order Notes

Project Name:	Hudson 1 Fed Com 008H	Turn Around	☒ Routine
Project Number:	TE012920106	Push:	
P.O. Number:	CC: 1139061001	Due Date:	
Sampler's Name:	Luis Del Val		



890-676 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	S	5/13/2021	948	4'	1	X	X	X	
FS02	S	5/13/2021	950	4'	1	X	X	X	
FS03	S	5/13/2021	954	4'	1	X	X	X	
FS04	S	5/13/2021	956	4'	1	X	X	X	
FS05	S	5/13/2021	958	4'	1	X	X	X	
FS06	S	5/13/2021	1000	4'	1	X	X	X	
FS07	S	5/13/2021	1002	5	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 Ti Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		5-17-21 1009			

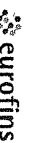
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 86220

Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

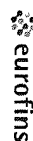
Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No:					
Client Contact:	Phone	Kramer Jessica			890-219-1					
Shipping/Receiving	E-Mail	jessica.kramer@eurofins.com	State of Origin		Page 1 of 1					
Company	Accreditations Required (See note)	NELAP - Louisiana, NELAP - Texas	New Mexico							
Address:	Due Date Requested				890-676-1					
1211 W. Florida Ave.	5/21/2021									
City:	TAT Requested (days)									
Midland										
State Zip:										
TX, 79701										
Phone:	PO #									
432-704-5440(Tel)										
Email:	WO #									
Project Name:	Project #									
Hudson 1 Fed Com 008H	89000004									
Site:	SSOV#									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=vegetal, B=brown, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
FS01 (890-676-1)	5/13/21	09 48	Mountain	Solid		X	X	X	1	
FS02 (890-676-2)	5/13/21	09 50	Mountain	Solid		X	X	X	1	
FS03 (890-676-3)	5/13/21	09 54	Mountain	Solid		X	X	X	1	
FS04 (890-676-4)	5/13/21	09 56	Mountain	Solid		X	X	X	1	
FS05 (890-676-5)	5/13/21	09 58	Mountain	Solid		X	X	X	1	
FS06 (890-676-6)	5/13/21	10 00	Mountain	Solid		X	X	X	1	
FS07 (890-676-7)	5/13/21	10 02	Mountain	Solid		X	X	X	1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.										
Possible Hazard Identification Unconfirmed Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months										
Empty Kit Relinquished by		Date	Time	Method of Shipment:						
Relinquished by: <i>[Signature]</i>		Date/Time: 5-17-21		Company:	Received by: <i>[Signature]</i>	Date/Time: 5-18-21 11:00am	Company:			
Relinquished by:		Date/Time:		Company:	Received by:	Date/Time:	Company:			
Relinquished by:		Date/Time:		Company:	Received by:	Date/Time:	Company:			
Custody Seals Intact		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.						
Δ Yes Δ No										

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



**Environment Testing
America**

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-676-1

SDG Number: TE012920106

Login Number: 676

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-676-1

SDG Number: TE012920106

Login Number: 676

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 05/18/21 11:10 AM

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

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 29720

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 29720
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. A soil boring was drilled within 0.5 miles of the Site to a depth of 150 feet bgs. No moisture or groundwater was encountered after the borehole was left open for 72 hours. Due to the close proximity to buried gas lines and belief that there is no imminent risk to human health, the environment, or groundwater, the installation of a 20-mil impermeable liner over the chloride impacted soil within the pipeline corridor is approved. The liner will be installed in the excavation area within the pipeline corridor to join the historical liners, as shown on Figure 5 on the corresponding report. Upon completion of the liner installation, the excavation will be backfilled with locally procured topsoil and recontoured to match pre-existing conditions.	9/20/2021