

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	NVV2003542379
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)	NVV2003542379
Contact mailing address	522 W. Mermod, Carlsbad, NM 88220		

Location of Release Source

Latitude 32.535411 Longitude -104.206987
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	ADU Hondo Tester	Site Type	Well Location
Date Release Discovered	1/05/2020	API# (if applicable)	30-015-24388 (Avalon Delaware Unit #609)

Unit Letter	Section	Township	Range	County
D	32	20S	28E	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) 15.86	Volume Recovered (bbls) 14.25
☒ Produced Water	Volume Released (bbls) 0.83	Volume Recovered (bbls) 0.75
	Is the concentration of dissolved chloride 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 site glass on tester busted releasing approximately 15.86 bbls of oil and 0.83 bbl of produced water. Vacuum trucked was called out and recovered 14.25 bbls of oil and 0.75 bbl of produced water. Additional third party resources have been retained to assist in the remediation.

Form C-141

State of New Mexico
Oil Conservation Division

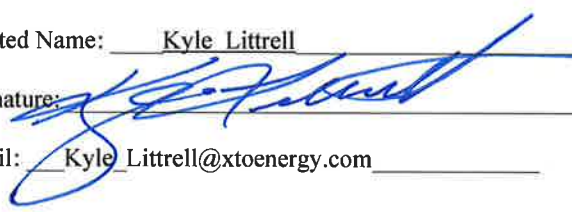
Page 2

Incident ID	NVV2003542379
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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: N/A	
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: 	Date: <u>1/20/2019</u>
email: <u>Kyle.Littrell@xtoenergy.com</u>	Telephone: _____
<u>OCD Only</u> Received by: <u>Victoria Venegas</u> Date: <u>02/04/2020</u>	

Location:	ADU Hondo Tester	
Spill Date:	1/5/2020	
Area 1		
Approximate Area =	2826.00	sq. ft.
Average Saturation (or depth) of spill =	1.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	15.45	bbls
Total Produced Water =	0.81	bbls
Area 2		
Approximate Area =	7537.00	sq. ft.
Average Saturation (or depth) of spill =	0.13	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.41	bbls
Total Produced Water =	0.02	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	15.86	bbls
Total Produced Water =	0.83	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	14.25	bbls
Total Produced Water =	0.75	bbls

Incident ID	NVV2003542379
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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.

State of New Mexico
Oil Conservation Division

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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: 12-23-2020

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

OCD Only

Received by: _____ Date: _____

Incident ID	NVV2003542379
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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.

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email: Kyle_Littrell@xtoenergy.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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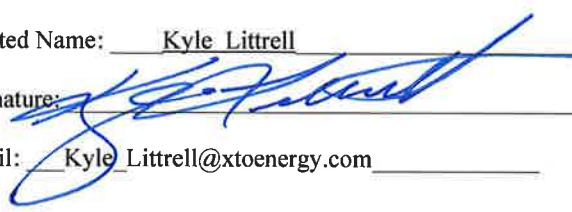
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Signature: 	Date: <u>1/20/2019</u>
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OCD Only Received by: <u>Victoria Venegas</u> Date: <u>02/04/2020</u>	

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Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

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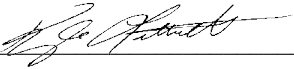
State of New Mexico
Oil Conservation Division

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Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature:  Date: 3-12-2021

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

OCD Only

Received by: _____ Date: _____

Incident ID	NVV2003542379
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Remediation Plan

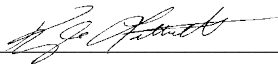
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- ☒ Scaled sitemap with GPS coordinates showing delineation points
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- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note 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.

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Printed Name: Kyle Littrell Title: SH&E Supervisor
Signature:  Date: 3-12-2021
email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Chad Hensley Date: 03/18/2021

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

Signature:  Date: 03/18/2021



WSP USA

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

January 4, 2021

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

**RE: Deferral Request and Remediation Work Plan
 ADU Hondo Tester
 Incident Number NVV2003542379
 Eddy County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP) (formerly LT Environmental, Inc.), 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 ADU Hondo Tester (Site) in Unit D, Section 32, Township 20 South, Range 28 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 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 and requesting deferral of final remediation around active production equipment until major Site construction, destruction, or well plugging and abandonment.

RELEASE BACKGROUND

On January 5, 2020, the sight glass on a tester broke, resulting in the release of 15.86 barrels (bbls) of crude oil and 0.83 bbls of produced water onto the surface of the well pad and into the pasture area northwest of the pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; approximately 14.25 bbls of crude oil and 0.75 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on January 20, 2020. The release was assigned Incident Number NVV2003542379.

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 New Mexico Office of the State Engineer (NMOSE) well CP-00851, located approximately 0.61 miles west of the Site. The well was most recently measured in September 1995. The groundwater well has a reported depth to groundwater of 115 feet bgs and a total depth of 255 feet bgs. Ground surface elevation at the groundwater well location is 3,239 feet above mean sea level (amsl), which is the same elevation as the Site. There is another well, CP-01714, due east of the Site with depth to water at 107 feet bgs. The referenced well records are included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an emergent wetland, located approximately 1,522 feet northeast 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 January 29, 2020, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. The release occurred on the well pad and flowed into the adjacent pasture northwest of the well pad. WSP personnel collected six preliminary assessment soil samples (SS01 through SS06) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. 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 were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC)



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

Laboratory analytical results for preliminary soil samples SS01 through SS06 indicated that BTEX, TPH, and/or chloride concentrations exceeded the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, excavation and delineation activities were warranted.

INITIAL DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between May 26, 2020 and July 27, 2020, WSP personnel were at the Site to oversee initial delineation and excavation activities. Six potholes (PH01 through PH06) 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 initially advanced to a depth of 4 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 1 foot bgs to 4 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil samples were handled and analyzed as described above. The potholes and delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for the delineation soil samples collected from pothole PH06, collected downgradient from the toe of the release extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. The shallow 1-foot bgs soil samples collected on the well pad (PH01 and PH02) contained no hydrocarbons, but did exhibit elevated chloride concentrations; however, chloride concentrations were compliant with the Closure Criteria in the subsequent 4-foot bgs samples. In samples collected off of the well pad, elevated TPH concentrations were present in PH03 to a depth of four feet bgs, no hydrocarbons were detected in samples collected from potholes PH04 or PH05; however, both samples collected from the top 4 feet from potholes PH03 through PH05 contained chloride concentrations exceeding the Closure Criteria.

Between May 27, 2020 and August 26, 2020, in order to address as much of the shallow impacts as possible, WSP oversaw excavation of impacted soil within the release extent on pad and in the pasture. Excavation activities were performed using a track-mounted backhoe and transport vehicle in the areas around preliminary soil samples SS01 through SS06. The excavation extent is presented on Figure 4. Photographic documentation was conducted during the excavation activities. A photographic log is included in Attachment 3.



Following removal of impacted soil, WSP collected 5-point composite soil samples at a frequency of at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite floor soil samples FS01 through FS21, FS01A, and FS02A were collected from the floor of the excavation at depths ranging from 1 foot to 4 feet bgs. Because the areas represented by floor samples FS20 and FS21 were so shallow (1 foot deep), those floor samples also represented any sidewall soil. Composite sidewall samples SW01 through SW20 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4 feet bgs. The excavation extent and excavation soil sample locations are presented on Figure 4. The excavation soil samples were collected, handled, and analyzed as described above.

The final excavation extent measured approximately 4,350 square feet. Additional soil could not be removed in the areas around sidewall samples SW03 and SW04 due to the proximity of active production equipment and pipelines. XTO safety policy restricts earth moving activities within 2 feet of active production equipment and pipelines. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment. This policy was enforced where impacted soil was identified within 2 feet of active production equipment and multiple active pipelines in excavation sidewall samples SW03 and SW04 (Figure 4). The impacted surface soil south of the pipelines (FS20 and FS21) was able to be removed to a depth of 1 foot bgs without compromising the pipelines due to the shallow depth of impacted soil. A total of approximately 460 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in all sidewall samples collected from the final excavation extent, except samples SW03 and SW04 that were collected along the edge of infrastructure where soil removal was restricted. All floor samples collected from the final excavation extent on the well pad were compliant with Closure Criteria. Floor samples FS10 through FS19, collected in the pasture excavation from a depth of 4 feet bgs, exceeded the Closure Criteria for chloride. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are provided in Attachment 4.

ADDITIONAL DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Additional delineation activities were scheduled to vertically delineate the pasture excavation in the area of floor samples FS10 through FS19, and to fully delineate the extent of impacted soil left in place surrounding the active production equipment. On May 26, 2020 and June 2, 2020, WSP personnel returned to the Site to oversee additional delineation activities. Potholes PH03 and PH05, located within the excavation extent, were advanced to depths of 20 feet and 16 feet



bgs, respectively, in an attempt to vertically delineate the chloride impacted soil identified in the floor of the pasture excavation. Three delineation soil samples were collected from pothole PH03 at depths of 6 feet, 12 feet, and 20 feet bgs. Two delineation soil samples were collected from pothole PH05 at depths of 10 feet and 16 feet bgs. Chloride was elevated in each sample (Figure 5).

Five additional potholes (PH07 through PH11) were advanced via track-mounted backhoe to a depth of 4 feet bgs within and around the release extent. Pothole PH07 was advanced on pad to delineate the lateral and vertical extent of impacted soil left in place around active production equipment and pipelines identified in sidewall sample SW04. Potholes PH08 through PH11 were advanced to the north, east, and west of the excavation to delineate the lateral extent of the release. Delineation soil samples were collected from potholes PH07 through PH11 from depths of 2 feet bgs and 4 feet bgs. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil samples were handled and analyzed as described above. The pothole locations are depicted on Figure 5. The delineation samples collected from 2 feet and 4 feet bgs were compliant with the Closure Criteria, with the exception of except the 2-foot bgs sample collected from pothole PH07 that exceeded the Closure Criteria for chloride. Based on the results of the pothole sampling, continued vertical delineation via a truck-mounted hollow-stem auger rig was scheduled.

Due to the depth limitations of the track-mounted backhoe, WSP personnel returned to the Site between August 10, 2020 and November 17, 2020, to complete delineation activities via a truck-mounted hollow stem auger rig. Boreholes BH02 and BH03 were advanced within the excavation at the former pothole PH03 and PH05 locations to vertically delineate chloride concentrations to below 600 mg/kg. Boreholes BH02 and BH03 were advanced to a depth of 61 feet bgs. Delineation soil samples were collected from the boreholes at depths ranging from 6 feet to 61 feet bgs. Boreholes BH01 and BH04 through BH08 were advanced 50 feet to 100 feet away from the release in order to document naturally occurring chloride concentrations at the Site. Boreholes BH01 and BH04 through BH08 were advanced to depths ranging from 20 feet to 36 feet bgs. Delineation soil samples were collected from the boreholes at depths ranging from 1 foot to 36 feet bgs. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil samples were collected, handled, and analyzed as described above at Xenco in Carlsbad, New Mexico. The locations of the delineation boreholes are presented on Figure 6.

Laboratory analytical results indicated that vertical delineation of chloride below 600 mg/kg was achieved at a depth of 61 feet bgs in borehole BH02 and a depth of 54 feet bgs in borehole BH03. Chloride concentrations in borehole BH02 ranged from 362 mg/kg to 2,600 mg/kg. Chloride concentrations in borehole BH03 ranged from 201 mg/kg to 9,400 mg/kg.

Laboratory analytical results for the delineation soil samples collected from background boreholes BH01 and BH04 through BH08 indicated that chloride concentrations ranged from 9.94



mg/kg in borehole BH01 at 3 feet bgs to 901 mg/kg in borehole BH05 at 20 feet bgs. Based on the location of the borings and occurrence of elevated chloride at depth, WSP suggests that elevated chloride concentrations as high as 901 mg/kg exist naturally in subsurface soil at the Site. In general, the elevated chloride is associated with underlying cemented or lithified formations, including a caliche and deeper sandstone and mudstone. Analytical data from the delineation boreholes (BH04 through BH07) establish a clear separation both vertically and laterally from the source material, which is represented by samples collected from BH02 and BH03.

CONCLUSIONS

Based on the delineation soil sample results, WSP can develop the following site conceptual model:

- All hydrocarbon impacted soil has been removed from the Site.
- Soil impacted by chloride has been removed from the well pad, except in a small area directly adjacent to and underlying subsurface pipelines and active production equipment and represented by excavation soil sample SW04 containing 993 mg/kg of chloride. Vertical delineation is approximately 3 feet bgs based on excavation samples collected north and south of the excavation sidewall.
- Impacted soil was removed to 4 feet bgs within the release extent in the pasture, and although excavation sidewall samples meet Closure Criteria, vertical delineation to 600 mg/kg chloride was not achieved until 54 feet and 61 feet bgs.
- Soil samples collected from potholes and boreholes surrounding the release extent confirm lateral delineation of the release and suggest elevated chloride as high as 901 mg/kg occurs naturally in the subsurface.
- While the background chloride concentration of 901 mg/kg does not account for all of the elevated chloride concentrations identified in soil beneath the release extent in the pasture, it can be applied to the small exceedances remaining on the well pad at 2 feet bgs in PH07 (640 mg/kg) and in excavation sidewall soil sample SW03 (665 mg/kg). Those samples meet background conditions and do not require additional remediation. The result is that remaining chloride impacts on pad are represented by SW04 (993 mg/kg chloride), directly under and north of the active pipelines and west of production equipment.

DEFERRAL REQUEST

A total of approximately 460 cubic yards of impacted soil were excavated from the Site; however, residual impacted soil was left in place immediately adjacent to active production equipment and pipelines for compliance with XTO safety policy regarding earth moving activities within 2 feet of any active production equipment and pipelines. Photographs 4 and 5 show the area associated with the active equipment. Laboratory analytical results for excavation sidewall sample SW04



indicated that soil with TPH and/or chloride concentrations exceeding the background concentration of 901 mg/kg was left in place immediately beneath and adjacent to the active equipment.

The impacted soil remaining in place is delineated vertically and laterally by excavation soil samples FS01A, FS02A, FS03 through FS07, FS20, SW01, SW02, and SW20 collected from the sidewalls and floor of the final excavation extent, and delineation soil samples collected from potholes PH01, PH02, PH07, and PH08. An estimated 55 cubic yards of impacted soil remains in place, assuming a maximum 3-foot depth based on the excavation and delineation soil samples listed above, that were compliant with the Closure Criteria.

XTO requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. WSP and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The majority of the released fluids were recovered during initial response activities, the impacted soil remaining in place is limited to the area immediately around the production equipment, and no saturated soil remains in-place. XTO requests deferral of final remediation for the area immediately surrounding active production equipment. The deferral request area is depicted on Figure 7.

PROPOSED REMEDIATION WORK PLAN

To address the remaining impacts in the pasture, which are characterized by chloride concentrations ranging from 201 mg/kg to 9,400 mg/kg and extending to 61 feet bgs, WSP proposes installation of a liner to mitigate further impacts into the subsurface. WSP does not believe additional excavation is warranted, as impacts in the top 4 feet have been removed and groundwater is documented to be greater than 100 feet bgs in the area. Delineation and excavation soil sampling provided full lateral and vertical delineation of the remaining impacted soil beneath the pasture excavation.

XTO intends to install a 20-mil impermeable liner over the impacted soil within the pasture excavation at approximately 4 feet bgs and then backfill the area with non-waste containing soil. The liner will be installed in the entire excavation extent within the pasture as identified on Figure 7. 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.



District II
Page 8

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

Spencer Lo
Staff Geologist

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

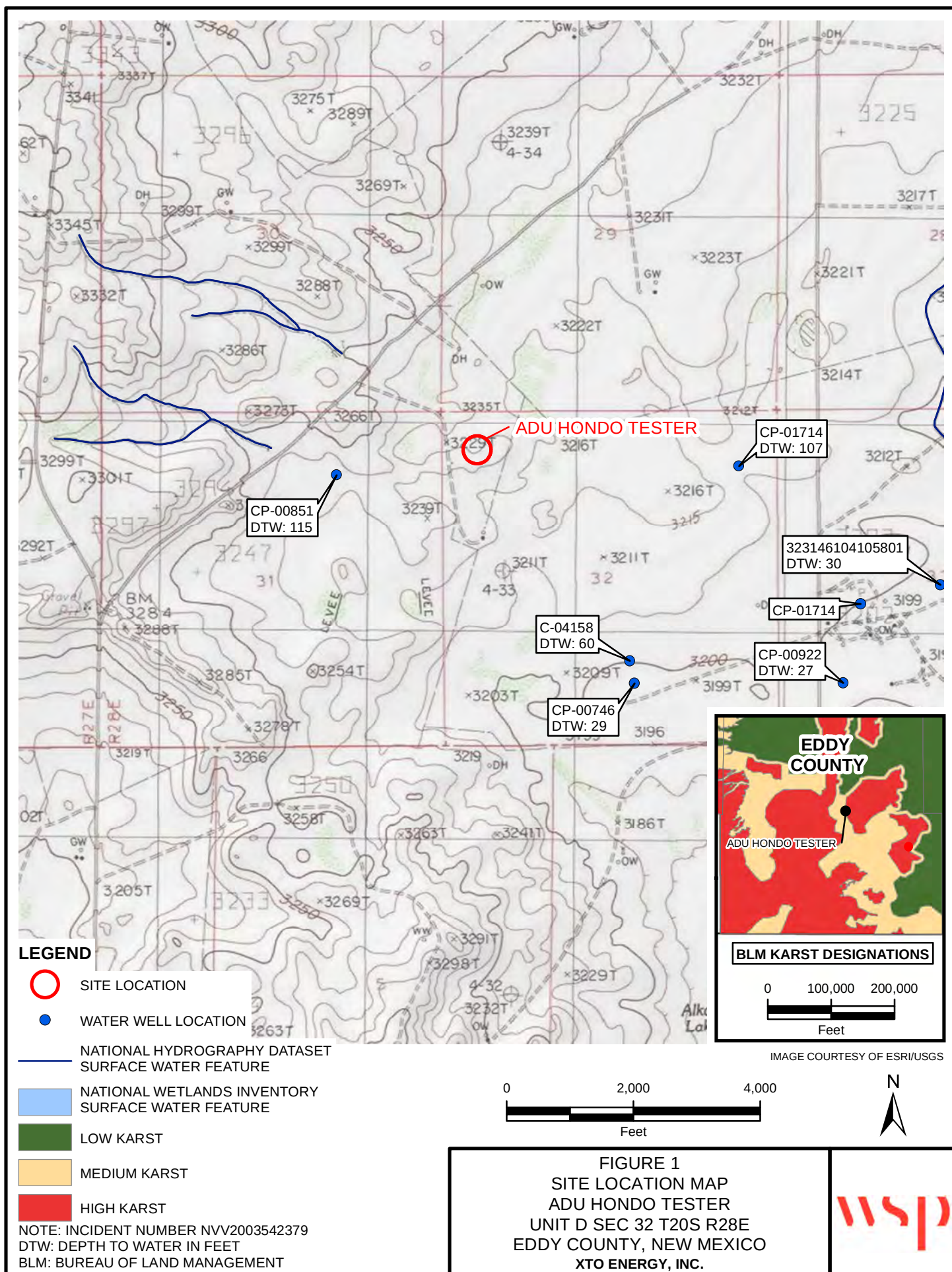
Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Jim Amos, Bureau of Land Management

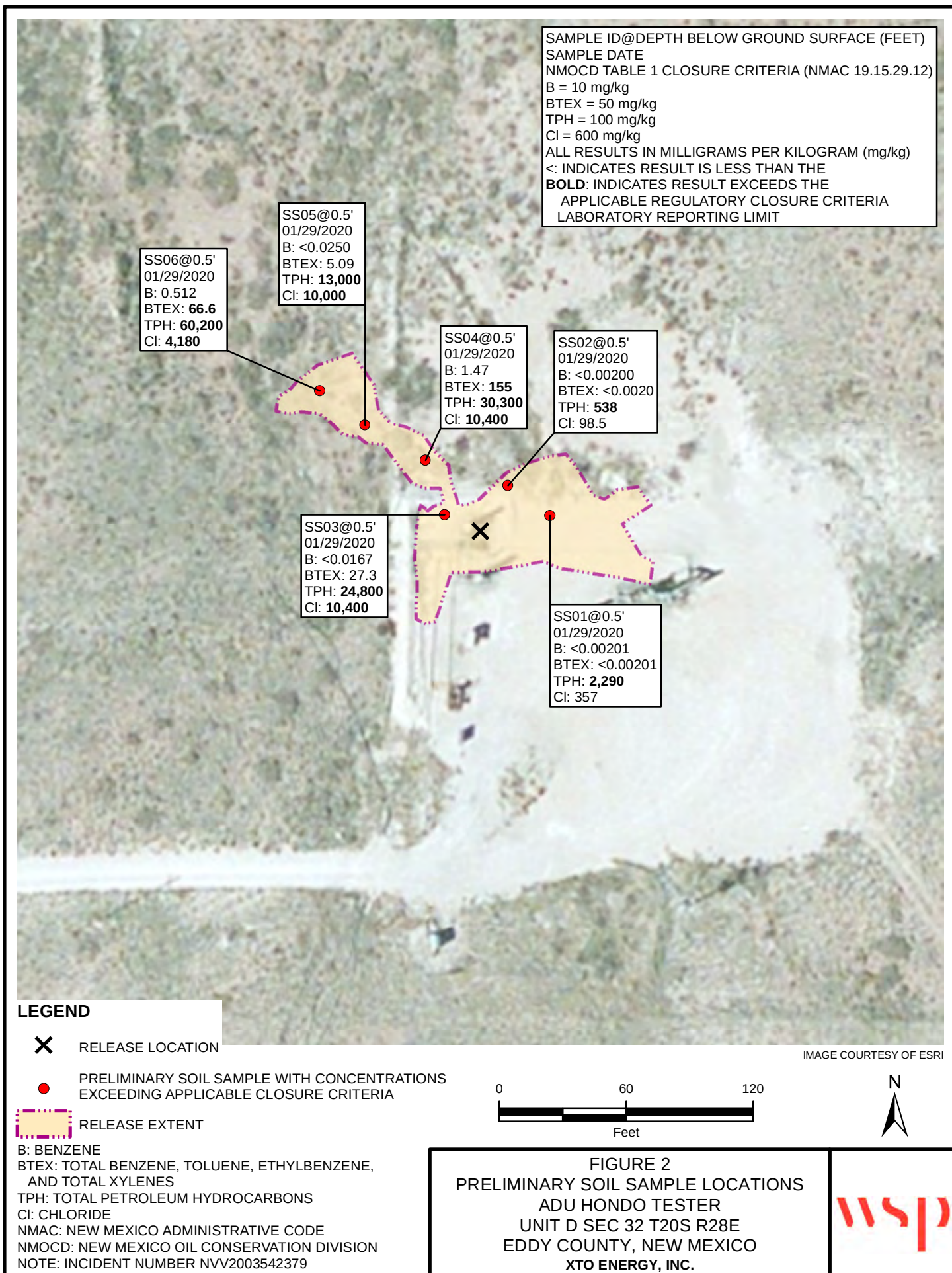
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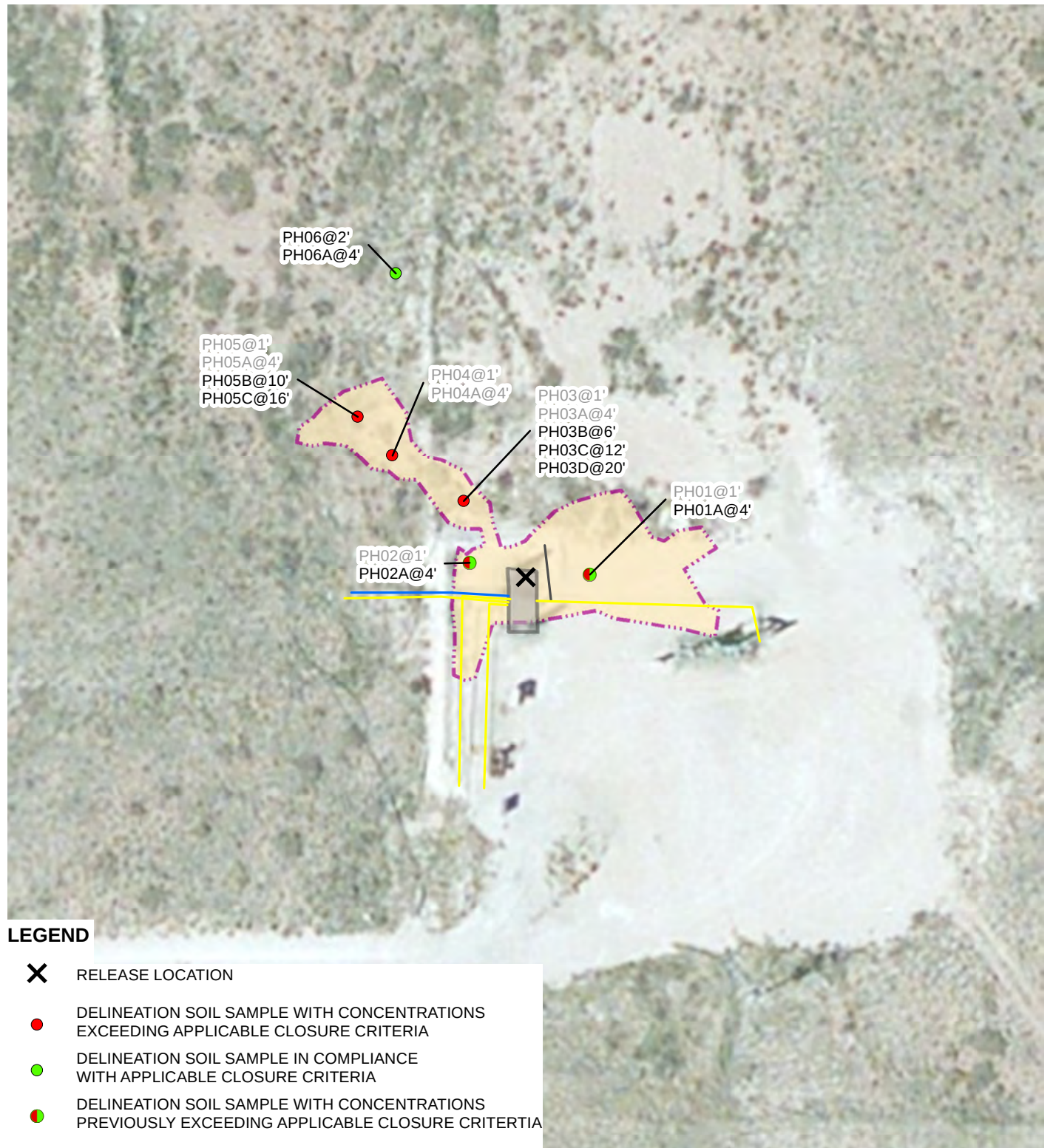
Figure 1 Site Location Map
Figure 2 Preliminary Soil Sample Locations
Figure 3 Delineation Soil Sample Locations
Figure 4 Excavation Soil Sample Locations
Figure 5 Additional Delineation Pothole Soil Sample Locations
Figure 6 Additional Delineation Borehole Soil Sample Locations
Figure 7 Proposed Liner Location and Deferral Area
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Records
Attachment 2 Lithologic / Soil Sampling Log
Attachment 3 Photographic Log
Attachment 4 Laboratory Analytical Reports

FIGURES



P:\XTO Energy\GIS\MXD\012920017_ADU HONDO TESTER\012920017_FIG01_SL_RECEPTOR_2020.mxd



**LEGEND**

RELEASE LOCATION



DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA



DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA

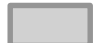
— GAS/PIPELINE

— WATER LINE

— UNMARKED LINE



RELEASE EXTENT



INFRASTRUCTURE

NOTE: INCIDENT NUMBER NVV2003542379
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
 THAT WAS REMOVED

IMAGE COURTESY OF ESRI

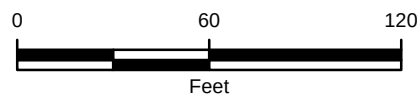
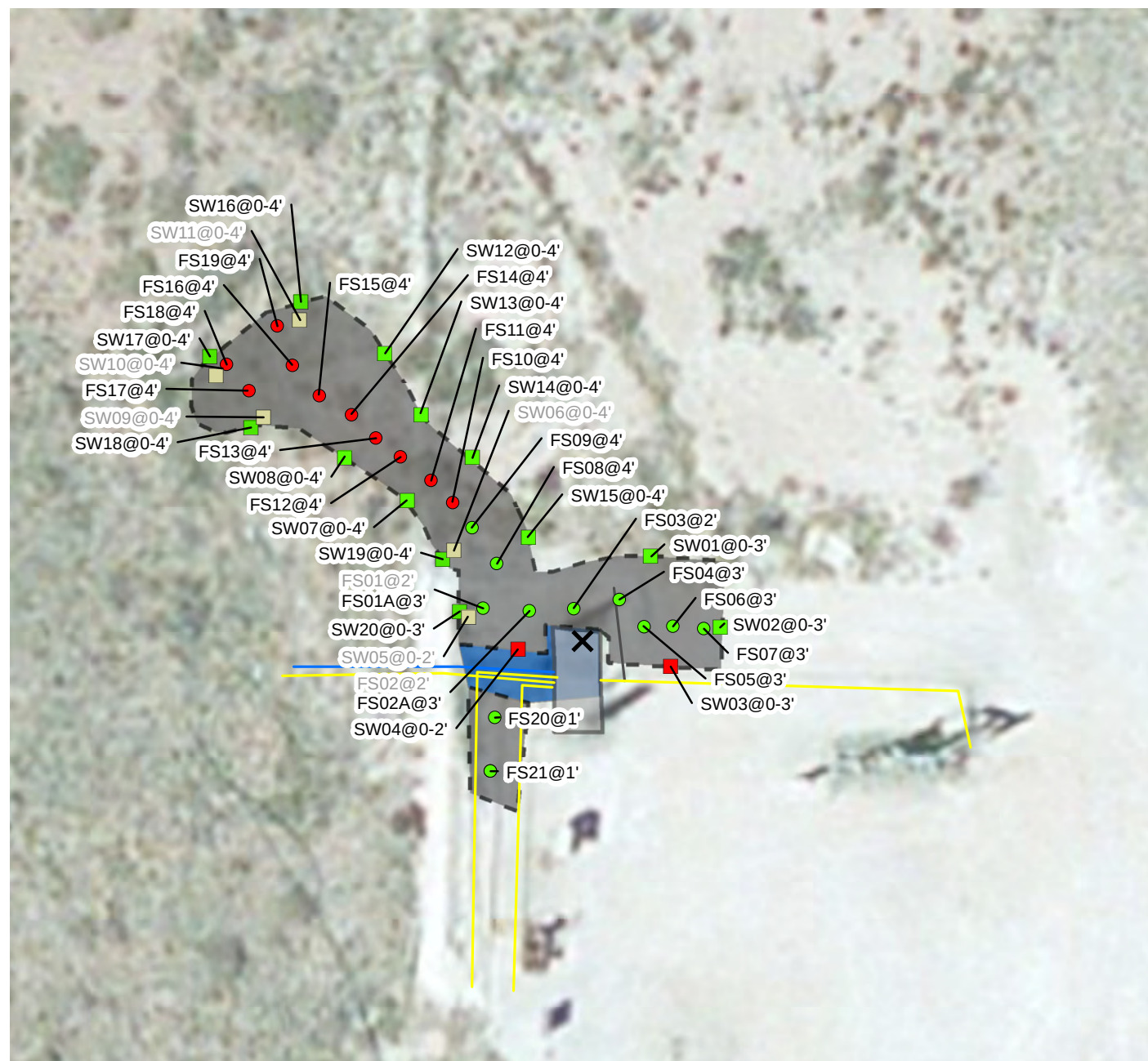


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
ADU HONDO TESTER
UNIT D SEC 32 T20S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



**LEGEND**

RELEASE LOCATION



EXCAVATION FLOOR SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA



EXCAVATION FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



EXCAVATION SIDEWALL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA



EXCAVATION SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



EXCAVATION SIDEWALL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED

— GAS/PIPELINE

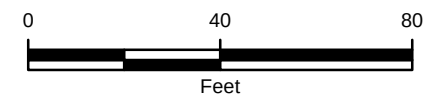
— WATER LINE

— UNMARKED LINE

INFRASTRUCTURE

DEFERRAL AREA

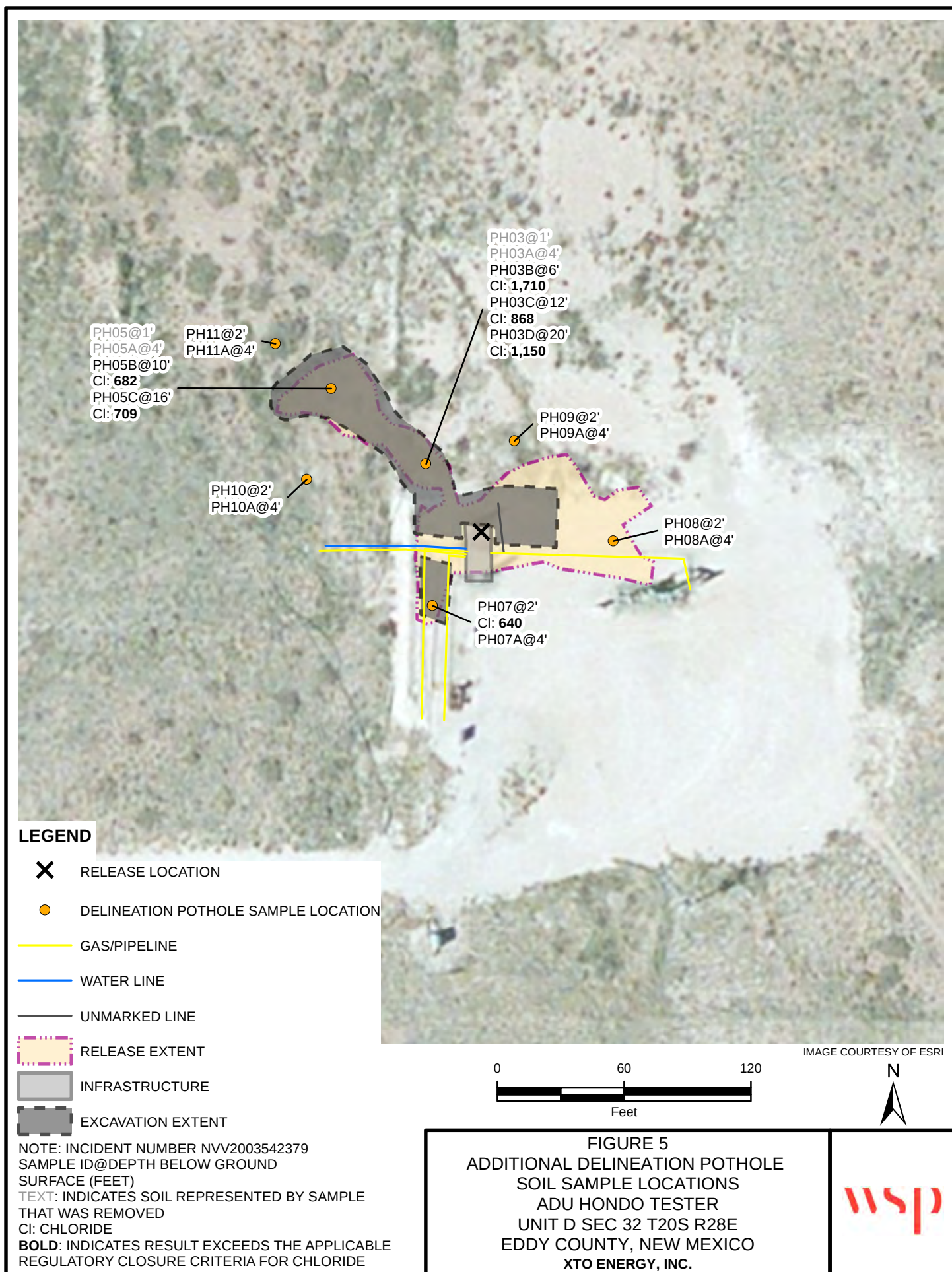
IMAGE COURTESY OF ESRI

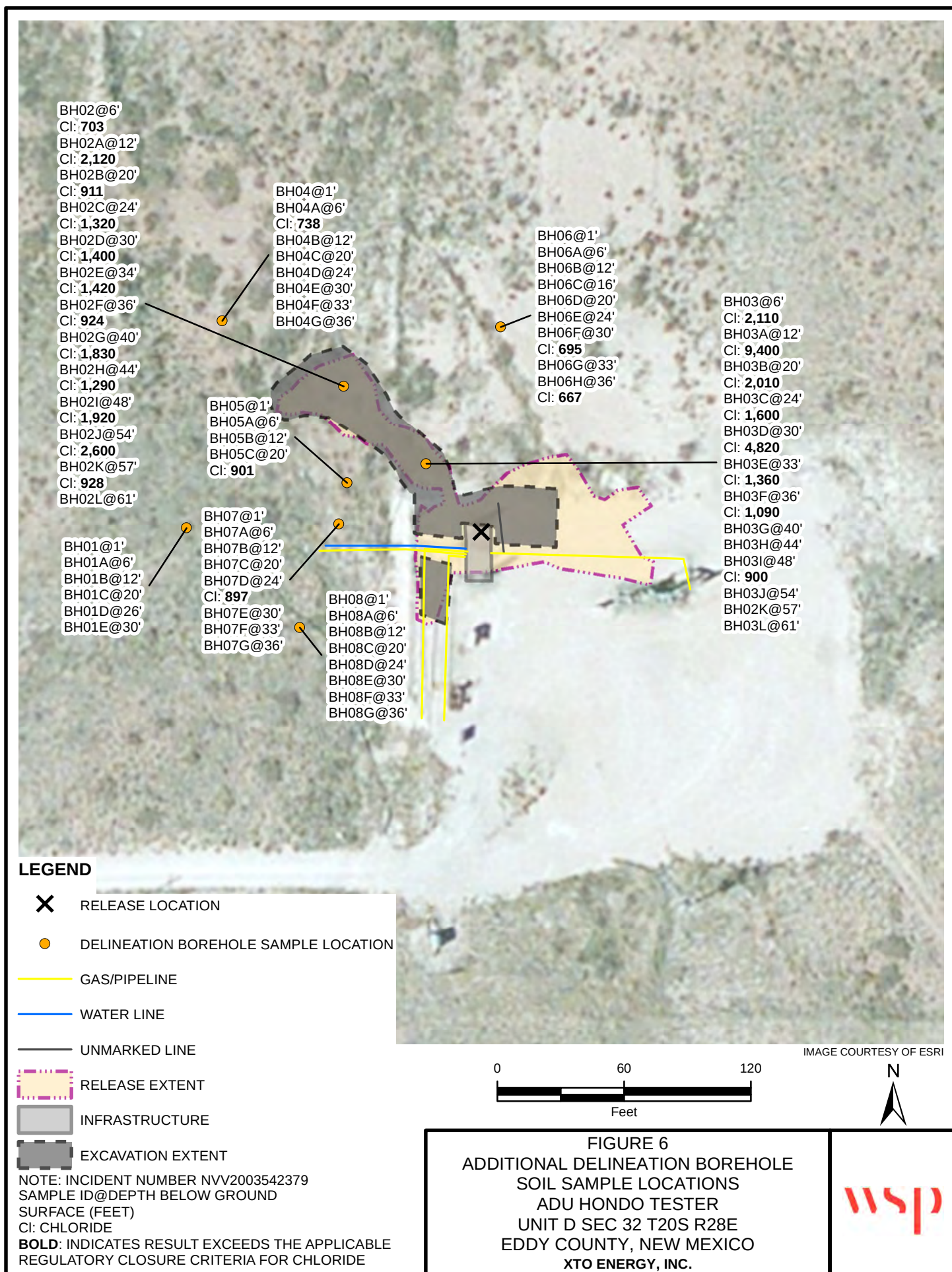


NOTE: INCIDENT NUMBER NVV2003542379
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
ADU HONDO TESTER
UNIT D SEC 32 T20S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.









LEGEND

-  GAS/PIPELINE
-  WATER LINE
-  UNMARKED LINE
-  INFRASTRUCTURE
-  DEFERRAL AREA
-  LINER EXTENT

NOTE: INCIDENT NUMBER NVV2003542379

IMAGE COURTESY OF ESRI

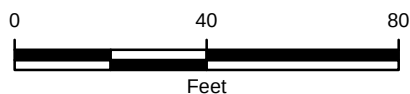


FIGURE 7
PROPOSED LINER LOCATION & DEFERRAL AREA
ADU HONDO TESTER
UNIT D SEC 32 T20S R28E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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	01/29/2020	0.5	<0.00201	<0.00201	2,000	<50.0	293	2,000	2,290	357
SS02	01/29/2020	0.5	<0.00200	<0.00200	434	<50.3	104	434	538	98.5
SS03	01/29/2020	0.5	<0.0167	27.3	20,900	1,660	2,200	22,600	24,800	10,400
SS04	01/29/2020	0.5	1.47	155	23,400	4,290	2,580	27,700	30,300	10,400
SS05	01/29/2020	0.5	<0.0250	5.09	11,700	266	1,020	12,000	13,000	10,000
SS06	01/29/2020	0.5	0.512	66.6	42,700	12,800	4,740	55,500	60,200	4,180
Delineation Samples										
PH01	05/26/2020	1	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	1,020
PH01A	05/26/2020	4	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	466
PH02	05/26/2020	1	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	2,420
PH02A	05/26/2020	4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	396
PH03	05/26/2020	1	<0.00201	<0.00201	220	<50.0	<50.0	220	220	949
PH03A	05/26/2020	4	<0.00201	<0.00201	195	<50.0	<50.0	195	195	1,820
PH03B	05/26/2020	6	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	1,720
PH03C	05/26/2020	12	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	868*
PH03 D	05/27/2020	20	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	1,150
PH04	05/26/2020	1	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,590
PH04A	05/26/2020	4	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	2,070
PH05	05/26/2020	1	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	2,630
PH05A	05/26/2020	4	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,040
PH05B	06/02/2020	10	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	682*
PH05C	06/02/2020	16	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	709*

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
PH06	05/26/2020	2	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	<100
PH06A	05/26/2020	4	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	<100
PH07	06/01/2020	2	<0.00202	<0.00202	63.6	<50.1	<50.1	63.6	63.6	640*
PH07A	06/01/2020	4	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	333
PH08	06/02/2020	2	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	382
PH08A	06/02/2020	4	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	437
PH09	06/01/2020	2	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	248
PH09A	06/01/2020	4	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	350
PH10	06/02/2020	2	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	20.9
PH10A	06/02/2020	4	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	33.4
PH11	06/02/2020	2	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	37.7
PH11A	06/02/2020	4	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	193
BH01	08/10/2020	1	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	<9.94
BH01A	08/10/2020	6	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	202
BH01B	08/10/2020	12	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	329
BH01C	08/10/2020	20	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	311
BH01D	08/10/2020	26	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	572
BH01E	08/10/2020	30	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	594
BH02	10/13/2020	6	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	703*
BH02A	10/13/2020	12	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	2,120
BH02B	10/13/2020	20	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	911
BH02C	10/13/2020	24	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	1,320
BH02D	10/13/2020	30	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,400

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
BH02E	10/13/2020	34	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	1,420
BH02F	10/13/2020	36	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	924
BH02G	11/16/2020	40	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	1,830
BH02H	11/16/2020	44	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	1,290
BH02I	11/16/2020	48	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	1,920
BH02J	11/17/2020	54	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	2,600
BH02K	11/17/2020	57	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	928
BH02L	11/17/2020	61	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	362
BH03	08/06/2020	6	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	2,110
BH03A	08/06/2020	12	<0.00202	<0.00202	98.3	<50.2	<50.2	98.3	98.3	9,400
BH03B	08/06/2020	20	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	2,010
BH03C	08/06/2020	24	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	1,600
BH03D	08/06/2020	30	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	4,820
BH03E	10/13/2020	33	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,360
BH03F	10/13/2020	36	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,090
BH03G	11/16/2020	40	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	570
BH03H	11/16/2020	44	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	342
BH03I	11/16/2020	48	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	900*
BH03J	11/16/2020	54	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	532
BH03K	11/16/2020	57	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	436
BH03L	11/16/2020	61	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	201
BH04	10/14/2020	1	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	36.0
BH04A	10/14/2020	6	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	738*

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
BH04B	10/14/2020	12	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	394
BH04C	10/14/2020	20	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	361
BH04D	10/14/2020	24	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	443
BH04E	10/14/2020	30	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	388
BH04F	10/14/2020	33	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	166
BH04G	10/14/2020	36	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	121
BH05	10/13/2020	1	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	137
BH05A	10/13/2020	6	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	483
BH05B	10/13/2020	12	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	530
BH05C	10/13/2020	20	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	901*
BH06	10/14/2020	1	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	<9.98
BH06A	10/14/2020	6	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	558
BH06B	10/14/2020	12	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	406
BH06C	10/14/2020	16	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	552
BH06D	10/14/2020	20	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	413
BH06E	10/14/2020	24	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	360
BH06F	10/14/2020	30	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	695*
BH06G	10/14/2020	33	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	570
BH06H	10/14/2020	36	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	667*
BH07	10/14/2020	1	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	<9.94
BH07A	10/14/2020	6	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	423
BH07B	10/14/2020	12	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	447
BH07C	10/14/2020	20	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	267

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
BH07D	10/14/2020	24	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	897*
BH07E	10/14/2020	30	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	209
BH07F	10/14/2020	33	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	235
BH07G	10/14/2020	36	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	206
BH08	10/16/2020	1	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<9.94
BH08A	10/16/2020	6	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	140
BH08B	10/16/2020	12	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	64.2
BH08C	10/16/2020	20	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	346
BH08D	10/16/2020	24	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	387
BH08E	10/16/2020	30	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	417
BH08F	10/16/2020	33	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	220
BH08G	10/16/2020	36	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	181
Excavation Floor Samples										
FS01	05/28/2020	2	<0.00200	0.294	151	<50.1	<50.1	151	151	344
FS01A	07/27/2020	3	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	300
FS02	05/27/2020	2	<0.00198	0.0554	331	<49.9	58.0	331	389	200
FS02A	07/27/2020	3	<0.00201	<0.00201	73.1	<50.0	<50.0	73.1	73.1	320
FS03	05/28/2020	2	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	451
FS04	05/27/2020	3	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	376
FS05	05/27/2020	3	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	469
FS06	05/27/2020	3	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	325
FS07	05/27/2020	3	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	342

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
FS08	06/01/2020	4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	87.3
FS09	06/01/2020	4	<0.00200	<0.00200	51.5	<50.0	<50.0	51.5	51.5	501
FS10	06/01/2020	4	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	1,260
FS11	06/01/2020	4	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	2,150
FS12	06/01/2020	4	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	2,570
FS13	06/01/2020	4	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	2,240
FS14	05/28/2020	4	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	1,020
FS15	05/28/2020	4	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	1,240
FS16	05/28/2020	4	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	961
FS17	05/28/2020	4	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	777*
FS18	07/27/2020	4	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	1,220
FS19	07/27/2020	4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	1,090
FS20	08/26/2020	1	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	166
FS21	08/26/2020	1	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	176
Excavation Sidewall Samples										
SW01	05/28/2020	0 - 3	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	397
SW02	05/28/2020	0 - 3	<0.00201	0.0579	53.4	<50.0	<50.0	53.4	53.4	564
SW03	05/28/2020	0 - 3	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	665*
SW04	05/28/2020	0 - 2	<0.00200	0.0187	1,080	<50.0	181	1,080	1,260	993
SW05	05/28/2020	0 - 2	<0.00202	0.108	137	<50.2	<50.2	137	137	154
SW06	06/01/2020	0 - 4	<0.00202	<0.00202	250	<50.2	81.4	250	331	62.3
SW07	06/01/2020	0 - 4	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	110

Table 1

Soil Analytical Results
ADU Hondo Tester
INCIDENT NUMBER NVV2003542379
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
SW08	06/01/2020	0 - 4	<0.00200	<0.00200	69.6	<49.8	<49.8	69.6	69.6	283
SW09	05/28/2020	0 - 4	<0.00201	0.0242	571	<49.8	74.3	571	645	275
SW10	05/28/2020	0 - 4	<0.00201	0.0445	570	<49.9	71.8	570	642	72.7
SW11	05/28/2020	0 - 4	<0.00202	<0.00202	545	<49.8	65.4	545	610	46.0
SW12	06/01/2020	0 - 4	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	324
SW13	06/01/2020	0 - 4	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	291
SW14	06/01/2020	0 - 4	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	120
SW15	06/01/2020	0 - 4	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	13.1
SW16	07/27/2020	0 - 4	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	28.8
SW17	07/27/2020	0 - 4	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	25.4
SW18	07/27/2020	0 - 4	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	26.6
SW19	07/27/2020	0 - 4	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	182
SW20	07/27/2020	0 - 3	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	38.4

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

Greyed data represents samples that were excavated

BOLD - indicates results that exceed the Table 1 Closure Criteria

* - indicates results that exceed the Table 1 Closure Criteria for chloride, but are below the identified background concentration.

ATTACHMENT 1: REFERENCED WELL RECORD



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
	CP 00851	4	1	2	31	20S	28E	573791	3599940*

x

Driller License:	421	Driller Company:	GLENN'S WATER WELL SERVICE
Driller Name:	GLENN, CLARK A."CORKY" (LD)		
Drill Start Date:	09/14/1995	Drill Finish Date:	09/14/1995
Log File Date:	09/21/1995	PCW Rcv Date:	Source: Shallow
Pump Type:		Pipe Discharge Size:	Estimated Yield: 12 GPM
Casing Size:	6.63	Depth Well:	255 feet
		Depth Water:	115 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	205	230	Limestone/Dolomite/Chalk

x

Casing Perforations:	Top	Bottom
	181	255

x

Meter Number:	8675	Meter Make:	HALLIBURTON
Meter Serial Number:	1STA4383	Meter Multiplier:	1.0000
Number of Dials:	5	Meter Type:	Diversion
Unit of Measure:	Barrels 42 gal.	Return Flow Percent:	
Usage Multiplier:		Reading Frequency:	Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
01/01/2005	2005	724	A	jw		0
04/01/2005	2005	1214	A	jw		0.063
07/12/2005	2005	1853	A	jw		0.082
10/07/2005	2005	2775	A	jw		0.119
01/01/2006	2005	4074	A	RPT		0.167
04/03/2006	2006	5539	A	RPT		0.189
04/01/2010	2010	917	R	RPT	Meter Rollover	12.294

x

**YTD Meter Amounts:	Year	Amount
	2005	0.431
	2006	0.189
	2010	12.294

x

*UTM location was derived from PLSS - see Help

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

POINT OF DIVERSION SUMMARY

USGS 323146104105801 20S.28E.33.32322

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°31'46", Longitude 104°10'58" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 43 feet
Land surface altitude: 3,198 feet above NAVD88.
Well completed in "Rustler Formation" (312RSLR) local aquifer

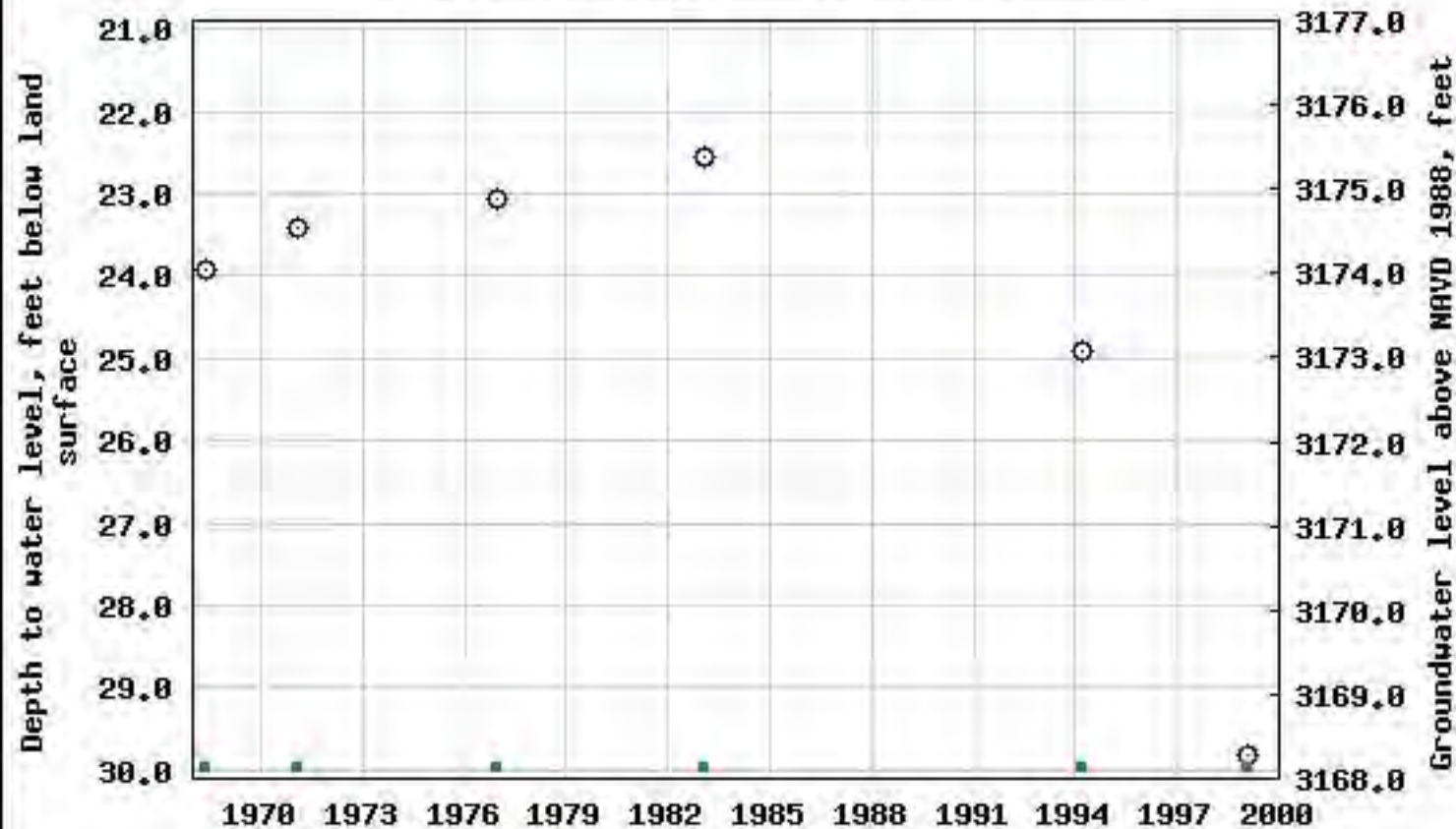
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1968-05-23	1999-01-28	6
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

USGS 323146104105801 20S.28E.33.32322



ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH01		5/26/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	1,253	8.9	Y	PH01A	1'	1	CCHE	0-3' Caliche w/ sand, brown, tan, odor, surface staining, poorly graded, m-f			
D	1,253	8.2	N			2		-2'- no stain			
D	870	10	N			3					
							SP-SM	3'-4' Sand, brown, m-f, poorly graded, no odor, no stain, trace silt			
D	435	10.2	N	PH01A	4'	4					
								TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH02		5/26/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-1' Caliche w/ sand, brown-tan, no odor, stain, m-f, poorly graded			
							CCHE				
D	1,437	7.7	Y	PH02	1'	1		1'-4' Sand, brown, m-f, poorly graded, no odor, no stain, trace silt, trace caliche			
D	435	6.5	N			2					
D	320	4.2	N			3					
D	563	4.3	N	PH02A	4'	4					
								TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:				
					PH03		5/26/2020				
					Site Name:		ADU Hondo				
					RP or Incident Number:		NVV2003542379				
					LTE Job Number:		TE012929917				
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:	20'	
				HACH Chloride Strips, PID				-			
Comments: TD @ 20', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-4' Sand w/ caliche, brown, tan caliche, stain, odor, trace silt, m-f, poorly graded			
D	870	48.8	Y	PH03	1'	1	SP-SM	-1'-4'- no stain			
D	1,139	29.9	N			2		-2'-4' increase in caliche and caliche size			
D	1,773	49.8	N			3					
D	2,022	22.8	N	PH03A	4'	4					
								4'-10' Caliche, tan, no odor, no stain			
D	1,437	0.2	N	PH03B	6'	5	CCHE				
						6					
						7					
D	1,542	0.00	N			8					
						9					
D	1,894	0.0	N			10					
								10'-20' Sand, tan, no odor, no stain, m-f, poorly graded, trace silt			
D	1,139	0.0	N	PH03C	12'	11	SM				
						12					
						13					
M	1,773	0.2	N			14		-14'-20' Moist			
						15					
M	1,043	0.2	N			16					
						17					
						18					
						19					
M	2156	0.0	N	PH03D	20'	20					
						21		TD @ 20' -- max depth w/ trackhoe			
						22					
						23					
						24					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name:		Date:				
		PH04		5/26/2020				
		Site Name:		ADU Hondo				
		RP or Incident Number:		NVV2003542379				
		LTE Job Number:		TE012929917				
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening:		Logged By SL Method: Backhoe				
		HACH Chloride Strips, PID		Hole Diameter: - Total Depth: 4'				
Comments: TD @ 4', chloride field screening values include 60% error factor								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		0-4' Sandy clay, brown, m-f, poorly graded, no odor, trace silt, no stain
				PH04	1'	1		
D	2,972	0.0	N			2	SP-SC	
						3		-3'- increase in caliche content
D	1,542	0.0	N	PH04A	4'	4		
						5		TD @ 4'
						6		
						7		
						8		
						9		
						10		
						11		
						12		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH05		Date: 5/26/2020	
								Site Name: ADU Hondo			
								RP or Incident Number: NVV2003542379			
								LTE Job Number: TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: SL		Method: Backhoe	
Lat/Long:				Field Screening: HACH Chloride Strips, PID				Hole Diameter: -		Total Depth: 16'	
Comments: TD @ 16', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-2' Sandy clay, brown, tan caliche, no stain, odor, trace silt, m-f			
					1'	1	SP-SC				
D	3,628	102.0	N	PH05		2					
						3		2'-10' Caliche, tan, no odor, no stain			
D	563	19.4	N	PH05A	4'	4					
						5					
D	1,043	0.2	N			6	CCHE				
						7					
D	640	0.0	N			8					
						9					
D	563	0.3	N	PH05B	10'	10					
						11		10'-16'- Sand, tan, no odor, no stain, m-f, poorly graded, trace silt			
M	1,139	0.0	N			12					
						13	SM				
M	1,139	0.0	N			14					
						15					
M	960	0.0	N	PH05C	16'	16					
						17		TD @ 16'			
						18					
						19					
						20					
						21					
						22					
						23					
						24					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH06		5/26/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-4' Caliche, plant-type odor, no stain, tan			
						1					
D	<186	105.3	N	PH06	2'	2	CCHE				
						3					
D	<186	0.0	N	PH06A	4'	4		TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH07		6/1/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-4' Sand, brown, no odor, no stain, m-f, poorly graded, trace silt, some caliche			
						1	SP-SM				
D	556	2.2	N	PH07	2'	2					
						3					
D	435	1.2	N	PH07A	4'	4		TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:					
						PH08		6/1/2020					
						Site Name:		ADU Hondo					
						RP or Incident Number:		NVV2003542379					
						LTE Job Number:		TE012929917					
LITHOLOGIC / SOIL SAMPLING LOG						Logged By		SL		Method:		Backhoe	
Lat/Long:				Field Screening:				Hole Diameter:		Total Depth:			
				HACH Chloride Strips, PID				-		4'			
Comments: TD @ 4', chloride field screening values include 60% error factor													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks					
						0	CCHE	0-6" Caliche, no odor, no stain, tan					
						1	SP-SM	6"-2' Sand, brown, no odor, no stain, m-f, poorly graded, trace silt, some caliche					
D	409	0.6	N	PH08	2'	2		2'-4' Caliche, tan, no odor, no stain					
						3	CCHE						
D	435	0.0	N	PH08A	4'	4							
						5		TD @ 4'					
						6							
						7							
						8							
						9							
						10							
						11							
						12							

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH09		6/1/2020	
						Site Name:		ADU Hondo	
						RP or Incident Number:		NVV2003542379	
						LTE Job Number:		TE012929917	
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: SL		Method: Backhoe	
Lat/Long:				Field Screening:		Hole Diameter:		Total Depth:	
				HACH Chloride Strips, PID		-		4'	
Comments: TD @ 4', chloride field screening values include 60% error factor									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0		0-2' Sand, brown, no odor, no stain, m-f, poorly graded, trace silt, trace caliche	
						1	SP-SM		
D	377	0.0	N	PH09	2'	2			
								2'-4' Caliche, tan, no odor, no stain	
						3	CCHE		
D	377	0.0	N	PH09A	4'	4			
								TD @ 4'	
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH10		6/2/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-2' Sand, brown, no odor, no stain, m-f, poorly graded, trace silt, trace caliche			
						1	SP-SM				
D	<186	0.0	N	PH10	2'	2		2'-4' Caliche, tan, no odor, no stain			
						3	CCHE				
D	<186	0.0	N	PH10A	4'	4		TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:			
						PH11		6/2/2020			
						Site Name:		ADU Hondo			
						RP or Incident Number:		NVV2003542379			
						LTE Job Number:		TE012929917			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By	SL	Method:	Backhoe
Lat/Long:				Field Screening:				Hole Diameter:	Total Depth:		
				HACH Chloride Strips, PID				-	4'		
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-4' Sandy clay, brown, tan caliche, no stain, odor, trace silt, m-f			
						1					
D	<186	0.0	N	PH11	2'	2	SP-SC				
						3					
D	<186	0.0	N	PH11A	4'	4		TD @ 4'			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH01		8/10/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535437, -104.207429			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 30'
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with 7 bags of (50 lbs) of hydrated bentonite chips. 0 -30' bgs.TD @ 30'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	0.2(<186)	0.0	N	BH01	1'	1	SP	0-1'
						2		SAND, dry, brown-light brown, poorly graded, find grained, trace caliche grave, trace roots, no stain, no odor
						3		
						4		1'-11'
						5		CALICHE, dry, off white, moderately consolidated, some sub-angular gravel and pebble, no stain, no odor
D	1.4(186)	0.0	N	BH01A	6'	6	CCHE	
						7		
						8		
						9		
						10		
						11		
D	2.8(563)	0	N	BH01B	12'	12		11'-19' SAND, dry, brown-light brown, poorly graded, fine-very fine grained, some sub rounded gravel and pebble, no stain, no odor
						13		
						14		
						15	SP	
						16		
						17		
						18		
						19		
D	2.8(563)	0.0	N	BH01C	20'	20		19'-25' SANDSTONE, dry, reddish brown, moderately consolidated, fine grained, poorly graded, some silt, no stain no odor
						21		
D	2.0(320)	0	N		22'	22	SP-S	-22'-25' moist
						23		-23'-25' split spoon refusal
						24		
						25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH01		8/10/2020	
					Site Name: ADU HONDO			
					RP or Incident Number: NVV2003542379			
LTE Job Number: TE012920017					Logged By BB, SL		Method: Hollow Stem Auger	
LITHOLOGIC / SOIL SAMPLING LOG					Lat/Long: 32.535437, -104.207429		Field Screening: Chloride, PID	
Hole Diameter: 6.25"					Total Depth: 30'			
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with 7 bags of (50 lbs) of hydrated bentonite chips. 0-30' bgs, TD @ 30'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	2.8(563)	0.0	N	BH01D	26'	26	CH-S	26'-28' MUDSTONE, dry, light gray-gray, cohesive, high plasticity, no stain, no odor
						27		
						28		
						29	CH-S	28'-30' MUDSTONE, moist, reddish brown, high plasticity, moderately consolidated, some small black mottling, no stain, no odor
M	2.4(435)	0.0	N	BH01E	30'	30		
						31		TD @ 30'
						32		
						33		
						34		
						35		
						36		
						37		
						38		
						39		
						40		
						41		
						42		
						43		
						44		
						45		
						46		
						47		
						48		
						49		
						50		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH02		8/6/2020 - 11/16/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535621, -104.207187			Field Screening: Chloride, PID		Hole Diameter: 6.25"		Total Depth: 65'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 65'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						1 2 3 4	OPEN	0-4' OPEN EXCAVATION
D	2.4(435)	1.4	N	BH02	6'	5 6 7 8 9 10 11	CCHE	4'-15' CALICHE, dry, tan, brown, moderately consolidated, some gravel, no stain, no odor
D	5.8(2022)	0.1	N	BH02A	12'	12 13 14 15		
M	4.6(1331)	1.1	N	BH02B	20'	16 17 18 19 20 21 22	SP	15'-22' SAND, moist, reddish brown, poorly graded, fine-very fine grained, poorly consolidated, no stain, no odor
M	5.0(1942)	1.4	N	BH02C	24'	23 24 25	SP-S	22'-31' SANDSTONE, moist, reddish brown, poorly graded, fine-very fine grained, poorly consolidated, no stain, no odor -22'-25' Moderately consolidated

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH02		8/6/2020 - 11/16/2020	
					Site Name: ADU HONDO			
					RP or Incident Number: NVV2003542379			
LTE Job Number: TE012920017					Logged By BB, SL		Method: Hollow Stem Auger	
LITHOLOGIC / SOIL SAMPLING LOG					Lat/Long: 32.535621, -104.207187		Field Screening: Chloride, PID	
					Hole Diameter: 6.25"		Total Depth: 65'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 65'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	4.4(1235)	1.4	N	BH02D	30'	26	SP-S	
						27		
						28		
						29		
						30		
						31		
						32	CL-S	31'-32' MUDSTONE, moist, light gray - gray, low plasticity, no stain, no odor, gradational transition
M	3.8(960)	1.0	N	BH02E	34'	33	CH-S	32'-59' MUDSTONE, moist, reddish brown, high plasticity, cohesive, some crystalline white gypsum veins, blocky, no stain, no odor
						34		
						35		
M	2.0 (320)	0.5	N	BH02F	36'	36		-35'-35.5 some fine grained sand
						37		
						38		
M	5.0(1512)	0.3	N	BH02G	40'	39		
						40		
						41		
M	4.0(1043)	0.7	N	BH02H	44'	42		-44'-47' siltstone stringer, trace very fine sand
						43		
						44		
M	4.6(1331)	0.3	N	BH02I	48'	45		
						46		
						47		
						48		
						49		
						50		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH02		8/6/2020 - 11/16/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535621, -104.207187			Field Screening: Chloride, PID		Hole Diameter: 6.25"		Total Depth: 65'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 65'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	3.8(870)	0.5	N	BH02J	54'	51	CH-S	-53'-53.5' medium grain sand stringer (3 cm)
						52		
						53		
						54		
						55		
M	3.8(870)	0.2	N	BH02K	57'	56		-56'-57' low plasticity mudstone stringer, light gray-gray, some
						57		
						58		
						59		
M	2.2(308)	0.1	N	BH02L	61'	60	SP-S	59'-65' SANDSTONE, moist, brown, light-brown, poorly graded sand, fine grain, unconsolidated, some silt, no stain, no odor
						61		
						62		
						63		
						64		
M	0.6(<186)	0.1	N		65'	65		
						66		TD @ 65'
						67		
						68		
						69		
						70		
						71		
						72		
						73		
						74		
						75		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH03		8/6/2020 - 11/16/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535506, -104.207066			Field Screening: Chloride, PID		Hole Diameter: 6.25"		Total Depth: 61'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 61'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						1 2 3 4	OPEN	0-4' OPEN EXCAVATION
D	6.0(2157)	7.4	N	BH03	6'	5 6 7 8 9 10	CCHE	4'-10' CALICHE, dry, tan, offwhite, moderately consolidated, some subangular gravel, no stain, no odor
M	6.0(2157)	7.3	N	BH03A	12'	11 12 13 14 15 16 17 18 19	SP	10'-23' SAND, moist, reddish brown, poorly graded, fine-very fine grained, some subangular gravel and pebble, no stain, no odor
M	5.8(2022)	0.0	N	BH03B	20'	20 21		
M	6.4(2451)	0	N		22'	22 23		
M	4.8(1433)	0.0	N	BH03C	24'	24 25	SP-S	23'-27' SANDSTONE, moist, reddish brown, poorly graded, fine-very fine grained, poorly consolidated, no stain, no odor

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH03		8/6/2020 - 11/16/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535506, -104.207066			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 61'
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 61'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	5.6(1894)	0.0	N		26'	26		
						27		
M	6.6(2716)	0	N		28'	28		27'-33' MUDSTONE, moist, light gray - gray, poorly plasticity, cohesive, no stain, no odor
						29		
M	7.8(3898)	0.0	N	BH03D	30'	30	CH-S	-28'-30' increase in moisture
						31		
						32		
M	3.4(793)	0.5	N	BH03E	33'	33		
						34	CH-S	33'-36' MUDSTONE, moist, reddish brown, high plasticity, cohesive, some crystalline gypsum veins, no stain, no odor
						35		
M	2.4(435)	0.5	N	BH03F	36'	36		-36'-39' siltstone stringer, trace very fine sand
						37		-36'-40' gypsum absent
						38		
M	3.0(640)	0.2	N		38'	38		
						39		
M	3.0(640)	0.2	N	BH03G	40'	40		-40'-44' trace fine grain sand pockets
						41		
M	3.2(710)	0.1	N		42'	42		
						43		
M	4.4(1235)	0.4	N	BH03H	44'	44		-44'-46' abundant coarse crystalline gypsum inclusions
						45		
M	3.6(870)	0.3	N		46'	46		
						47		
M	2.4(435)	0.4	N	BH02I	48'	48		
						49		
M	2.8(563)	0.4	N		50'	50		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH03		8/6/2020 - 11/16/2020	
					Site Name: ADU HONDO			
					RP or Incident Number: NVV2003542379			
LTE Job Number: TE012920017					Logged By BB, SL		Method: Hollow Stem Auger	
LITHOLOGIC / SOIL SAMPLING LOG					Lat/Long: 32.535506, -104.207066		Field Screening: Chloride, PID	
					Hole Diameter: 6.25"		Total Depth: 61'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 61'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						51'		
M	2.0(320)	0.3	N		52'	52'		
M	2.6(499)	0.4	N	BH03J	54'	53'		52'-61' SANDSTONE, moist, brown, light-brown, fine grained, poorly graded, poorly consolidated, very silty, gradual transition mudstone, some fine crystalline gypsum veins, (<1 mm)
						54'		
						55'		
						56'	SP-S	
M	1.6(224)	0.2	N	BH03K	57'	57'		
						58'		
M	1.6(224)	0.3	N		59'	59'		
						60'		
M	1.2(<186)	0.3	N	BH03L	61'	61'		
						62'		TD @ 61'
						63'		
						64'		
						65'		
						66'		
						67'		
						68'		
						69'		
						70'		
						71'		
						72'		
						73'		
						74'		
						75'		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH04		10/14/2020	
					Site Name: ADU HONDO			
					RP or Incident Number: NVV2003542379			
LTE Job Number: TE012920017					Logged By BB, SL		Method: Hollow Stem Auger	
LITHOLOGIC / SOIL SAMPLING LOG					Lat/Long: 32.535706, -104.207373		Field Screening: Chloride, PID	
					Hole Diameter: 6.25"		Total Depth: 36'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	0.0 (<186)	0.0	N	BH04	1'	1	SP	0-2'
						2		SAND, dry, brown-light brown, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor
						3	CCHE	2'-15'
						4		CALICHE, dry, tan, off-white, moderately consolidated, some subangular gravel, no stain, no odor
						5		
D	2.8(563)	0.0	N	BH04A	6'	6		-10'-15' some brown fine grain sand
						7		
						8		
						9		
						10		
						11		
						12		
D	2.0(320)	0.8	N	BH04B	12'	12		
						13		
						14		
						15		
M	2.6(499)	0.9	N		16'	16	SP-S	15'-29'
						17		SANDSTONE, moist, reddish brown, poorly graded, fine grained, poorly consolidated, trace fine crystalline white gypsum, no stain, no odor
						18		
						19		
M	2.4(435)	1.1	N	BH04C	20'	20		
						21		
						22		
						23		
M	2.8(563)	0.8	N	BH04D	24'	24		-24'-25' light gray
						25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:		
					BH04		10/14/2020		
					Site Name: ADU HONDO				
					RP or Incident Number: NVV2003542379				
					LTE Job Number: TE012920017				
LITHOLOGIC / SOIL SAMPLING LOG						Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535706, -104.207373			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						26	SP-S	29'-36' MUDSTONE, moist, reddish dark brown, poorly high plasticity, cohesive, some trace crystalline gypsum veins, no stain, no odor	
						27			
						28			
						29			
M	0.6(<186)	0.6	N	BH04E	30'	30	CH-S	-33'-36' gypsum absent	
						31			
						32			
						33			
M	0.8(<186)	0.2	N	BH04F	33'	33			
						34			
						35			
						36			
M	0.8(<186)	0.2	N	BH04G	36'	36		TD @ 36' BGS	
						37			
						38			
						39			
						40			
						41			
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH05		10/13/2020	
					Site Name: ADU HONDO			
					RP or Incident Number: NVV2003542379			
LTE Job Number: TE012920017					Logged By BB, SL		Method: Hollow Stem Auger	
LITHOLOGIC / SOIL SAMPLING LOG					Lat/Long: 32.535495, -104.207182		Field Screening: Chloride, PID	
					Hole Diameter: 6.25"		Total Depth: 25'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 25'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	1.4 (186)	0.9	N	BH05	1'	1	SP	0-1.5'
						2		SAND, dry, brown-light brown, poorly graded, fine grained, trace caliche, gravel, trace roots, no stain, no odor
						3		
						4		1.5'-15'
						5		CALICHE, dry, tan, off-white, moderately consolidated, some subangular gravel, no stain, no odor
D	2.2(377)	0.6	N	BH05A	6'	6		-10'-15' tan - off-white
						7		
						8		
						9	CCHE	
						10		
						11		
D	2.8(377)	0.7	N	BH05B	12'	12		
						13		
						14		
						15		
M	2.8(563)	0.7	N		16'	16		15'-20'
						17	SP	SAND, dry, brown-light brown, poorly graded, fine grain, gradual transition, no stain, no odor
						18		
						19		
M	3.8(960)	0.8	N	BH05C	20'	20		
						21		20'-25'
						22		SANDSTONE, moist, reddish brown, poorly graded, fine grained, moderately consolidated, no stain, no odor
						23	SP-S	
M	5.2(1651)	0.8	N	BH05D	24'	24		
						25		TD @ 25'

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH06		10/14/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535698, -104.206945			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	0.2(<186)	0.0	N	BH06	1'	1	SP	0-2' SAND, dry, brown-light brown, poorly graded, fine grained, trace caliche gravel, trace roots, no stain, no odor
						2		
						3	CCHE	2'-15' CALICHE, dry, off-white, moderately consolidated, some subangular gravel and pebble, no stain, no odor
						4		
						5		
D	2.0(320)	0.0	N	BH06A	6'	6		
						7		
						8		
						9		
						10		
						11		
						12		
D	2.0(320)	0.8	N	BH06B	12'	12		15'-24' SAND, dry, reddish brown, poorly graded, fine grain, gradual no stain, no odor
						13		
						14		
						15		
D	3.0(640)	0	N	BH06C	16'	16	SP	
						17		
						18		
						19		
M	2.6(499)	0.0	N	BH06D	20'	20		
						21		
						22		
						23		
M	1.8(268)	0.0	N	BH06E	24'	24		24'-29' SANDSTONE, moist, reddish brown, poorly graded, fine grained, moderately consolidated, no stain, no odor
						25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:		
					BH06		10/14/2020		
					Site Name: ADU HONDO				
					RP or Incident Number: NVV2003542379				
					LTE Job Number: TE012920017				
LITHOLOGIC / SOIL SAMPLING LOG						Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535698, -104.206945			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						26	SP-S		
						27			
						28			
						29			
M	1.2(<186)	0.0	N	BH06F	30'	30	CH-S	29'-36' MUDSTONE, moist, reddish dark brown, poorly high plasticity, cohesive, some trace crystalline gypsum veins, no stain, no odor -33'-36' gypsum absent	
						31			
						32			
						33			
M	0.8(<186)	0.0	N	BH06G	33'	33			
						34			
						35			
M	0.6(<186)	0.0	N	BH06H	36'	36			
TD @ 36' BGS									
						37			
						38			
						39			
						40			
						41			
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH07		10/14/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535441, -104.207195			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	0.8(<186)	0.0	N	BH07	1'	1	SP	0-3' SAND, dry, brown-light brown, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor
						2		
						3		
D	2.2(378)	0.4	N	BH07A	6'	4	CCHE	3'-12' CALICHE, dry, off-white, moderately consolidated, some subangular gravel and pebble, no stain, no odor
						5		
						6		
						7		
						8		
						9		
						10		
D	2.4(435)	0.6	N	BH07B	12'	12		
M	1.6(224)	0.5	N		16'	13	SP	12'-19' SAND, dry, reddish brown, poorly graded, fine grain, gradual no stain, no odor -15'-19' moist
						14		
						15		
						16		
						17		
						18		
						19		
M	2.2(377)	0.4	N	BH07C	20'	20	SP-S	19'-25' SANDSTONE, moist, reddish brown, poorly graded, fine grained, moderately consolidated, no stain, no odor
						21		
						22		
						23		
M	3.6(870)	0.4	N	BH07D	24'	24		
						25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: BH07		Date: 10/14/2020				
		Site Name: ADU HONDO						
		RP or Incident Number: NVV2003542379						
		LTE Job Number: TE012920017						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.535441, -104.207195		Field Screening: Chloride, PID		Hole Diameter: 6.25"				
				Total Depth: 36'				
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						26	CL-S	25'-27' MUDSTONE, moist, off-white - light gray, low plasticity, cohesion, no stain, no odor
						27		
M	1.8(268)	0.0	N	BH07E	30'	28	CH-S	27'-36' MUDSTONE, moist, reddish dark brown, high plasticity, cohesive, abundant medium crystalline gypsum inclusions, blocky, no stain, no odor
						29		
						30		
						31		
						32		
M	0.8(<186)	0.0	N	BH07F	33'	33		
						34		
						35		
M	0.8(<186)	0.4	N	BH07G	36'	36		
						37		TD @ 36' BGS
						38		
						39		
						40		
						41		
						42		
						43		
						44		
						45		
						46		
						47		
						48		
						49		
						50		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH08		10/14/2020	
					Site Name:		ADU HONDO	
					RP or Incident Number:		NVV2003542379	
					LTE Job Number:		TE012920017	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535307, -104.207255			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	0.8(<186)	0.0	N	BH07	1'	1	SP	0-1.5' SAND, dry, brown-light brown, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor
						2		
						3		
						4		
						5		
D	1.0(<186)	0.2	N	BH08A	6'	6		1.5'-19' CALICHE, dry, off-white, moderately consolidated, some subangular gravel and pebble, no stain, no odor
						7		
						8		
						9	CCHE	
						10		
						11		
D	1.0(<186)	0.2	N	BH08B	12'	12		
						13		
						14		
						15		
D	1.8(268)	0.2	N		16'	16		
						17		
						18		
						19		
D	2.2(378)	0.2	N	BH08C	20'	20		19'-29' SANDSTONE, dry, reddish brown, poorly graded, fine grained, moderately consolidated, no stain, no odor
						21	SP-S	
						22		
						23		
M	2.4(435)	0.1	N	BH08D	24'	24		
						25		

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:		
					BH08		10/14/2020		
					Site Name: ADU HONDO				
					RP or Incident Number: NVV2003542379				
					LTE Job Number: TE012920017				
LITHOLOGIC / SOIL SAMPLING LOG						Logged By BB, SL		Method: Hollow Stem Auger	
Lat/Long: 32.535307, -104.207255			Field Screening: Chloride, PID			Hole Diameter: 6.25"		Total Depth: 36'	
Comments: All chloride tests include a 60% correction factor. Borehole backfilled with same material that was removed. 0-30' bgs, TD @ 36'									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						26 27 28 29	SP-S		
M	1.2(<186)	0.0	N	BH08E	30'	30 31 32		29'-36' MUDSTONE, moist, reddish dark brown, high plasticity, cohesive, moderately consolidated, no stain, no odor	
M	1.0(<186)	0.2	N	BH08F	33'	33 34 35	CH-S	-30-30.5' fine grained sandstone stringer -33'-36' some fine crystalline white gypsum inclusions	
M	1.0(<186)	0.0	N	BH08G	36'	36			
						37 38 39 40 41 42 43 44 45 46 47 48 49 50		TD @ 36' BGS	

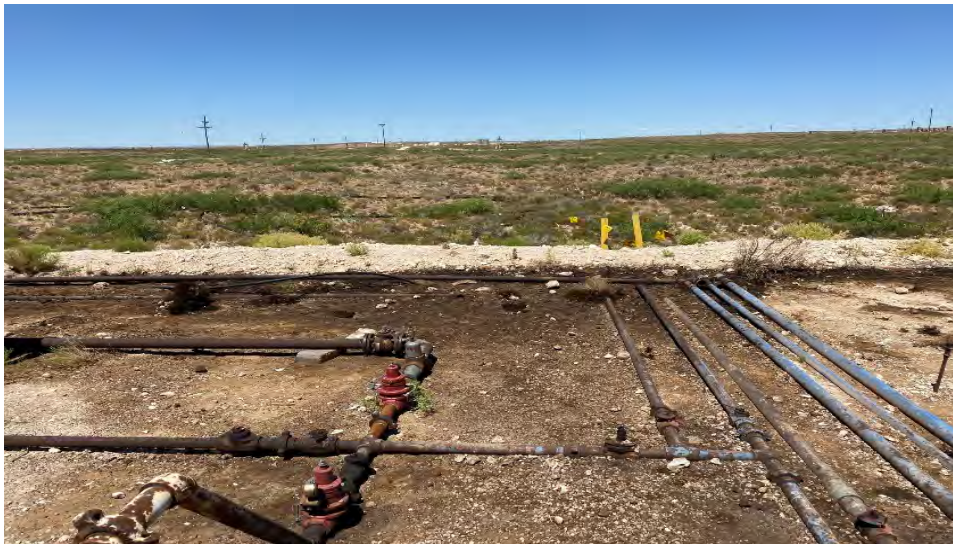
ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

XTO	ADU Hondo Tester CARLSBAD, NM	TE012920017

Photo No.	Date	
1	January 6 2020 – June 2, 2020	
View of staining off the northwest side of pad facing northwest.		

Photo No.	Date	
2	January 6 2020 – June 2, 2020	
View of staining on northwest corner of pad facing west.		



PHOTOGRAPHIC LOG

XTO	ADU Hondo Tester CARLSBAD, NM	TE012920017

Photo No.	Date	
3	January 6 2020 – June 2, 2020	
View of off-pad excavation facing northwest.		 A wide-angle photograph of a large, open excavation site. The ground is uneven and covered with dirt and rocks. In the background, a yellow excavator is visible, and a person is standing near it. The sky is blue with scattered white clouds. A red safety fence is visible on the left side of the frame.

Photo No.	Date	
4	January 6 2020 – June 2, 2020	
View of excavation on northwest corner of pad facing south.		 A photograph showing a construction site with several large, horizontal pipes laid out on the ground. The pipes are blue and silver. In the background, there is a small structure with a roof, and a red safety fence is visible. The sky is blue with some clouds.



PHOTOGRAPHIC LOG

XTO

ADU Hondo Tester
CARLSBAD, NM

TE012920017

Photo No.

5

Date

January 6 2020 –
June 2, 2020

View facing north. Sidewall sample SW04 is located on the north side of the pipelines.



Photo No.

6

Date

October 10, 2020

View of drilling and delineation activities.





PHOTOGRAPHIC LOG

XTO

ADU Hondo Tester
CARLSBAD, NM

TE012920017

Photo No.	Date	
7	October 13, 2020	
View of drilling and delineation activities.		

Photo No.	Date	
8	November 17, 2020	
View of drilling and delineation activities.		

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

Analytical Report 650762

for
LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

012919271

30-JAN-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



30-JAN-20

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **650762**

ADU Hondo Tester

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 XENCO Report Number(s) 650762. 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 XENCO Laboratories. 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. 650762 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 XENCO Laboratories 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 Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 650762****LT Environmental, Inc., Arvada, CO**

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	01-29-20 11:12	0.5 ft	650762-001
SS02	S	01-29-20 11:30	0.5 ft	650762-002
SS03	S	01-29-20 11:32	0.5 ft	650762-003
SS04	S	01-29-20 11:50	0.5 ft	650762-004
SS05	S	01-29-20 11:52	0.5 ft	650762-005
SS06	S	01-29-20 11:55	0.5 ft	650762-006



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: 012919271
Work Order Number(s): 650762

Report Date: 30-JAN-20
Date Received: 01/29/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3114900 Chloride by EPA 300

Lab Sample ID 650762-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 650762-006.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3114904 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3115017 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits Data confirmed by re-analysis. Samples affected are: 650762-005, -003.

Certificate of Analysis Summary 650762



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012919271

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed Jan-29-20 02:54 pm

Report Date: 30-JAN-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	650762-001	650762-002	650762-003	650762-004	650762-005	650762-006
	Field Id:	SS01	SS02	SS03	SS04	SS05	SS06
	Depth:	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jan-29-20 11:12	Jan-29-20 11:30	Jan-29-20 11:32	Jan-29-20 11:50	Jan-29-20 11:52	Jan-29-20 11:55
BTEX by EPA 8021B	Extracted:	Jan-29-20 18:54	Jan-29-20 18:54	Jan-29-20 18:54	Jan-29-20 18:54	Jan-29-20 18:54	Jan-29-20 18:54
	Analyzed:	Jan-30-20 00:08	Jan-30-20 00:29	Jan-30-20 08:40	Jan-30-20 01:50	Jan-30-20 09:00	Jan-30-20 02:11
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.0167 0.0167	1.47 0.201	<0.0250 0.0250	0.512 0.198
Toluene		<0.00201 0.00201	<0.00200 0.00200	1.32 0.0667	31.8 0.201	0.385 0.100	13.0 0.198
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	4.76 0.0667	25.9 0.201	0.680 0.100	11.0 0.198
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	14.6 0.133	67.5 0.402	2.38 0.200	29.5 0.395
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	6.60 0.0667	28.6 0.201	1.64 0.100	12.6 0.198
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	21.2 0.0667	96.1 0.201	4.02 0.100	42.1 0.198
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	27.3 0.0167	155 0.201	5.09 0.0250	66.6 0.198
Chloride by EPA 300	Extracted:	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:51
	Analyzed:	Jan-29-20 20:07	Jan-29-20 20:13	Jan-29-20 20:19	Jan-29-20 20:25	Jan-29-20 20:31	Jan-29-20 21:07
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		357 9.92	98.5 9.98	10400 504	10400 201	10000 202	4180 98.8
TPH by SW8015 Mod	Extracted:	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30	Jan-29-20 17:30
	Analyzed:	Jan-30-20 11:02	Jan-30-20 11:22	Jan-30-20 11:22	Jan-30-20 11:42	Jan-30-20 14:16	Jan-30-20 14:44
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.3 50.3	1660 251	4290 250	266 251	12800 498
Diesel Range Organics (DRO)		2000 50.0	434 50.3	20900 251	23400 250	11700 251	42700 498
Motor Oil Range Hydrocarbons (MRO)		293 50.0	104 50.3	2200 251	2580 250	1020 251	4740 498
Total GRO-DRO		2000 50.0	434 50.3	22600 251	27700 250	12000 251	55500 498
Total TPH		2290 50.0	538 50.3	24800 251	30300 250	13000 251	60200 498

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

Jessica Kramer
Project Assistant



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS01** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-001 Date Collected: 01.29.20 11.12 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3114898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	357	9.92	mg/kg	01.29.20 20.07		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 11.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	2000	50.0	mg/kg	01.30.20 11.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	293	50.0	mg/kg	01.30.20 11.02		1
Total GRO-DRO	PHC628	2000	50.0	mg/kg	01.30.20 11.02		1
Total TPH	PHC635	2290	50.0	mg/kg	01.30.20 11.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	01.30.20 11.02	
o-Terphenyl	84-15-1	103	%	70-135	01.30.20 11.02	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS01**
Lab Sample Id: 650762-001

Matrix: Soil
Date Collected: 01.29.20 11.12

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.20 00.08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.20 00.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.30.20 00.08		
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.30.20 00.08		



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS02** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-002 Date Collected: 01.29.20 11.30 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3114898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	98.5	9.98	mg/kg	01.29.20 20.13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.30.20 11.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	434	50.3	mg/kg	01.30.20 11.22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	104	50.3	mg/kg	01.30.20 11.22		1
Total GRO-DRO	PHC628	434	50.3	mg/kg	01.30.20 11.22		1
Total TPH	PHC635	538	50.3	mg/kg	01.30.20 11.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	01.30.20 11.22	
o-Terphenyl	84-15-1	111	%	70-135	01.30.20 11.22	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS02**
Lab Sample Id: 650762-002

Matrix: Soil
Date Collected: 01.29.20 11.30

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.20 00.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.20 00.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.30.20 00.29		
4-Bromofluorobenzene	460-00-4	95	%	70-130	01.30.20 00.29		



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS03** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-003 Date Collected: 01.29.20 11.32 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3114898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10400	504	mg/kg	01.29.20 20.19		50

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1660	251	mg/kg	01.30.20 11.22		5
Diesel Range Organics (DRO)	C10C28DRO	20900	251	mg/kg	01.30.20 11.22		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	2200	251	mg/kg	01.30.20 11.22		5
Total GRO-DRO	PHC628	22600	251	mg/kg	01.30.20 11.22		5
Total TPH	PHC635	24800	251	mg/kg	01.30.20 11.22		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	138	%	70-135	01.30.20 11.22	**
o-Terphenyl	84-15-1	112	%	70-135	01.30.20 11.22	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS03**
Lab Sample Id: 650762-003

Matrix: Soil
Date Collected: 01.29.20 11.32

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0167	0.0167	mg/kg	01.30.20 08.40	U	1
Toluene	108-88-3	1.32	0.0667	mg/kg	01.30.20 08.40		1
Ethylbenzene	100-41-4	4.76	0.0667	mg/kg	01.30.20 08.40		1
m,p-Xylenes	179601-23-1	14.6	0.133	mg/kg	01.30.20 08.40		1
o-Xylene	95-47-6	6.60	0.0667	mg/kg	01.30.20 08.40		1
Total Xylenes	1330-20-7	21.2	0.0667	mg/kg	01.30.20 08.40		1
Total BTEX		27.3	0.0167	mg/kg	01.30.20 08.40		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	122	%	70-130	01.30.20 08.40		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.20 08.40		



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS04** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-004 Date Collected: 01.29.20 11.50 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3114898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10400	201	mg/kg	01.29.20 20.25		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4290	250	mg/kg	01.30.20 11.42		5
Diesel Range Organics (DRO)	C10C28DRO	23400	250	mg/kg	01.30.20 11.42		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	2580	250	mg/kg	01.30.20 11.42		5
Total GRO-DRO	PHC628	27700	250	mg/kg	01.30.20 11.42		5
Total TPH	PHC635	30300	250	mg/kg	01.30.20 11.42		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	01.30.20 11.42	
o-Terphenyl	84-15-1	119	%	70-135	01.30.20 11.42	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS04**
Lab Sample Id: 650762-004

Matrix: Soil
Date Collected: 01.29.20 11.50

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.47	0.201	mg/kg	01.30.20 01.50		100
Toluene	108-88-3	31.8	0.201	mg/kg	01.30.20 01.50		100
Ethylbenzene	100-41-4	25.9	0.201	mg/kg	01.30.20 01.50		100
m,p-Xylenes	179601-23-1	67.5	0.402	mg/kg	01.30.20 01.50		100
o-Xylene	95-47-6	28.6	0.201	mg/kg	01.30.20 01.50		100
Total Xylenes	1330-20-7	96.1	0.201	mg/kg	01.30.20 01.50		100
Total BTEX		155	0.201	mg/kg	01.30.20 01.50		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.30.20 01.50		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.30.20 01.50		



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS05** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-005 Date Collected: 01.29.20 11.52 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3114898

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10000	202	mg/kg	01.29.20 20.31		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	266	251	mg/kg	01.30.20 14.16		5
Diesel Range Organics (DRO)	C10C28DRO	11700	251	mg/kg	01.30.20 14.16		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1020	251	mg/kg	01.30.20 14.16		5
Total GRO-DRO	PHC628	12000	251	mg/kg	01.30.20 14.16		5
Total TPH	PHC635	13000	251	mg/kg	01.30.20 14.16		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	139	%	70-135	01.30.20 14.16	**
o-Terphenyl	84-15-1	130	%	70-135	01.30.20 14.16	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS05**
Lab Sample Id: 650762-005

Matrix: Soil
Date Collected: 01.29.20 11.52

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0250	0.0250	mg/kg	01.30.20 09.00	U	1
Toluene	108-88-3	0.385	0.100	mg/kg	01.30.20 09.00		1
Ethylbenzene	100-41-4	0.680	0.100	mg/kg	01.30.20 09.00		1
m,p-Xylenes	179601-23-1	2.38	0.200	mg/kg	01.30.20 09.00		1
o-Xylene	95-47-6	1.64	0.100	mg/kg	01.30.20 09.00		1
Total Xylenes	1330-20-7	4.02	0.100	mg/kg	01.30.20 09.00		1
Total BTEX		5.09	0.0250	mg/kg	01.30.20 09.00		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	01.30.20 09.00		
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.20 09.00		



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS06** Matrix: Soil Date Received: 01.29.20 14.54
 Lab Sample Id: 650762-006 Date Collected: 01.29.20 11.55 Sample Depth: 0.5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 01.29.20 17.51 Basis: Wet Weight
 Seq Number: 3114900

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4180	98.8	mg/kg	01.29.20 21.07		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 01.29.20 17.30 Basis: Wet Weight
 Seq Number: 3115017

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	12800	498	mg/kg	01.30.20 14.44		10
Diesel Range Organics (DRO)	C10C28DRO	42700	498	mg/kg	01.30.20 14.44		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	4740	498	mg/kg	01.30.20 14.44		10
Total GRO-DRO	PHC628	55500	498	mg/kg	01.30.20 14.44		10
Total TPH	PHC635	60200	498	mg/kg	01.30.20 14.44		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	01.30.20 14.44	
o-Terphenyl	84-15-1	134	%	70-135	01.30.20 14.44	



Certificate of Analytical Results 650762

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **SS06**
Lab Sample Id: 650762-006

Matrix: Soil
Date Collected: 01.29.20 11.55

Date Received: 01.29.20 14.54
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 01.29.20 18.54

Basis: Wet Weight

Seq Number: 3114904

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.512	0.198	mg/kg	01.30.20 02.11		100
Toluene	108-88-3	13.0	0.198	mg/kg	01.30.20 02.11		100
Ethylbenzene	100-41-4	11.0	0.198	mg/kg	01.30.20 02.11		100
m,p-Xylenes	179601-23-1	29.5	0.395	mg/kg	01.30.20 02.11		100
o-Xylene	95-47-6	12.6	0.198	mg/kg	01.30.20 02.11		100
Total Xylenes	1330-20-7	42.1	0.198	mg/kg	01.30.20 02.11		100
Total BTEX		66.6	0.198	mg/kg	01.30.20 02.11		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.30.20 02.11		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.20 02.11		



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.

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.

ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3114898

MB Sample Id: 7695476-1-BLK

Matrix: Solid

LCS Sample Id: 7695476-1-BKS

Prep Method: E300P

Date Prep: 01.29.20

LCSD Sample Id: 7695476-1-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	259	104	259	104	90-110	0	20	mg/kg	01.29.20 17:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3114900

MB Sample Id: 7695510-1-BLK

Matrix: Solid

LCS Sample Id: 7695510-1-BKS

Prep Method: E300P

Date Prep: 01.29.20

LCSD Sample Id: 7695510-1-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	260	104	259	104	90-110	0	20	mg/kg	01.29.20 20:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3114898

Parent Sample Id: 650618-001

Matrix: Soil

MS Sample Id: 650618-001 S

Prep Method: E300P

Date Prep: 01.29.20

MSD Sample Id: 650618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	0.932	200	210	105	208	104	90-110	1	20	mg/kg	01.29.20 17:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3114898

Parent Sample Id: 650760-005

Matrix: Soil

MS Sample Id: 650760-005 S

Prep Method: E300P

Date Prep: 01.29.20

MSD Sample Id: 650760-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1720	199	1900	90	1890	85	90-110	1	20	mg/kg	01.29.20 18:49	X

Analytical Method: Chloride by EPA 300

Seq Number: 3114900

Parent Sample Id: 650762-006

Matrix: Soil

MS Sample Id: 650762-006 S

Prep Method: E300P

Date Prep: 01.29.20

MSD Sample Id: 650762-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4180	198	4400	111	4390	105	90-110	0	20	mg/kg	01.29.20 21:13	X

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.

ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115017

MB Sample Id: 7695507-1-BLK

Matrix: Solid

LCS Sample Id: 7695507-1-BKS

Prep Method: SW8015P

Date Prep: 01.29.20

LCSD Sample Id: 7695507-1-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	1140	114	1170	117	70-135	3	35	mg/kg	01.30.20 08:44	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1000	100	70-135	4	35	mg/kg	01.30.20 08:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		126		129		70-135	%	01.30.20 08:44
o-Terphenyl	84		130		122		70-135	%	01.30.20 08:44

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115017

Matrix: Solid

MB Sample Id: 7695507-1-BLK

Prep Method: SW8015P

Date Prep: 01.29.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.30.20 16:11	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3115017

Matrix: Soil

Parent Sample Id: 650761-001

MS Sample Id: 650761-001 S

Prep Method: SW8015P

Date Prep: 01.29.20

MSD Sample Id: 650761-001 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)	<50.1	1000	991	99	1100	110	70-135	10	35	mg/kg	01.30.20 09:23	
Diesel Range Organics (DRO)	<50.1	1000	859	86	1110	111	70-135	25	35	mg/kg	01.30.20 09:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		141	**	70-135	%	01.30.20 09:23
o-Terphenyl	102		131		70-135	%	01.30.20 09:23

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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.

ADU Hondo Tester

Analytical Method: BTEX by EPA 8021B

Seq Number: 3114904

MB Sample Id: 7695512-1-BLK

Matrix: Solid

LCS Sample Id: 7695512-1-BKS

Prep Method: SW5030B

Date Prep: 01.29.20

LCSD Sample Id: 7695512-1-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	0.120	120	0.128	128	70-130	6	35	mg/kg	01.29.20 17:00	
Toluene	<0.00200	0.100	0.111	111	0.119	119	70-130	7	35	mg/kg	01.29.20 17:00	
Ethylbenzene	<0.00200	0.100	0.109	109	0.116	116	71-129	6	35	mg/kg	01.29.20 17:00	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.228	114	70-135	7	35	mg/kg	01.29.20 17:00	
o-Xylene	<0.00200	0.100	0.107	107	0.114	114	71-133	6	35	mg/kg	01.29.20 17:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		108		70-130	%	01.29.20 17:00
4-Bromofluorobenzene	95		92		93		70-130	%	01.29.20 17:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3114904

Parent Sample Id: 650760-001

Matrix: Soil

MS Sample Id: 650760-001 S

Prep Method: SW5030B

Date Prep: 01.29.20

MSD Sample Id: 650760-001 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	0.122	122	0.0973	97	70-130	23	35	mg/kg	01.30.20 03:12	
Toluene	<0.00200	0.0998	0.0999	100	0.0785	79	70-130	24	35	mg/kg	01.30.20 03:12	
Ethylbenzene	<0.00200	0.0998	0.0827	83	0.0734	74	71-129	12	35	mg/kg	01.30.20 03:12	
m,p-Xylenes	<0.00399	0.200	0.152	76	0.164	82	70-135	8	35	mg/kg	01.30.20 03:12	
o-Xylene	<0.00200	0.0998	0.0825	83	0.0746	75	71-133	10	35	mg/kg	01.30.20 03:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	01.30.20 03:12
4-Bromofluorobenzene	92		92		70-130	%	01.30.20 03:12

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



Atlanta, GA (770) 449-8800

e

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project: Reporting Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐ Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible][illegible]

1631 / 245.1 / 7470 / 7471 : Hg

10

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 01.29.2020 02.54.00 PM

Work Order #: 650762

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)?	.8
#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

* 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: 01.29.2020

Checklist reviewed by:



Jessica Kramer

Date: 01.30.2020



Certificate of Analysis Summary 662757

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 09:00

Report Date: 06.01.2020 11:43

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662757-001	662757-002				
	Field Id:	PH06	PH06A				
	Depth:	2- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	05.26.2020 11:50	05.26.2020 12:00				
BTEX by EPA 8021B	Extracted:	05.28.2020 15:17	05.28.2020 15:17				
	Analyzed:	05.28.2020 15:57	05.28.2020 16:18				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00198 0.00198	<0.00200 0.00200				
	Toluene	<0.00198 0.00198	<0.00200 0.00200				
	Ethylbenzene	<0.00198 0.00198	<0.00200 0.00200				
	m,p-Xylenes	<0.00396 0.00396	<0.00399 0.00399				
	o-Xylene	<0.00198 0.00198	<0.00200 0.00200				
	Total Xylenes	<0.00198 0.00198	<0.00200 0.00200				
	Total BTEX	<0.00198 0.00198	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	05.28.2020 12:00	05.28.2020 12:00				
	Analyzed:	05.28.2020 13:12	05.28.2020 13:18				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	<100 100	<100 100				
TPH by SW8015 Mod	Extracted:	05.28.2020 12:00	05.28.2020 12:00				
	Analyzed:	05.28.2020 13:03	05.28.2020 14:05				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.2 50.2	<50.2 50.2				
	Diesel Range Organics (DRO)	<50.2 50.2	<50.2 50.2				
	Motor Oil Range Hydrocarbons (MRO)	<50.2 50.2	<50.2 50.2				
	Total GRO-DRO	<50.2 50.2	<50.2 50.2				
	Total TPH	<50.2 50.2	<50.2 50.2				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 662757

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.01.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.01.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **662757**

ADU Hondo

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 XENCO Report Number(s) 662757. 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 XENCO Laboratories. 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. 662757 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 662757

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH06	S	05.26.2020 11:50	2 ft	662757-001
PH06A	S	05.26.2020 12:00	4 ft	662757-002



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 662757

Report Date: 06.01.2020
Date Received: 05.28.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 662757

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH06** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662757-001 Date Collected: 05.26.2020 11:50 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<100	100	mg/kg	05.28.2020 13:12	U	10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 13:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 13:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 13:03	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 13:03	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 13:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	05.28.2020 13:03	
o-Terphenyl	84-15-1	90	%	70-135	05.28.2020 13:03	



Certificate of Analytical Results 662757

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH06**
Lab Sample Id: 662757-001

Matrix: Soil
Date Collected: 05.26.2020 11:50

Date Received: 05.28.2020 09:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.28.2020 15:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.28.2020 15:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.28.2020 15:57	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.28.2020 15:57	



Certificate of Analytical Results 662757

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH06A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662757-002 Date Collected: 05.26.2020 12:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<100	100	mg/kg	05.28.2020 13:18	U	10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 14:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 14:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 14:05	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 14:05	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 14:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	05.28.2020 14:05	
o-Terphenyl	84-15-1	95	%	70-135	05.28.2020 14:05	



Certificate of Analytical Results 662757

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH06A**
Lab Sample Id: 662757-002

Matrix: Soil
Date Collected: 05.26.2020 12:00

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.28.2020 16:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.28.2020 16:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.28.2020 16:18	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.28.2020 16:18	



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

MB Sample Id: 7704270-1-BLK

Matrix: Solid

LCS Sample Id: 7704270-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704270-1-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	255	102	90-110	0	20	mg/kg	05.28.2020 12:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1150	201	1340	95	1330	90	90-110	1	20	mg/kg	05.28.2020 15:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662759-006

Matrix: Soil

MS Sample Id: 662759-006 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662759-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1820	202	2020	99	2030	104	90-110	0	20	mg/kg	05.28.2020 15:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

MB Sample Id: 7704311-1-BLK

Matrix: Solid

LCS Sample Id: 7704311-1-BKS

Prep Method: SW8015P

Date Prep: 05.28.2020

LCSD Sample Id: 7704311-1-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	935	94	932	93	70-135	0	35	mg/kg	05.28.2020 11:41	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1080	108	70-135	1	35	mg/kg	05.28.2020 11:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		129		124		70-135	%	05.28.2020 11:41
o-Terphenyl	132		133		132		70-135	%	05.28.2020 11:41

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

Matrix: Solid

MB Sample Id: 7704311-1-BLK

Prep Method: SW8015P

Date Prep: 05.28.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.28.2020 11:21	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

Parent Sample Id: 662757-001

Matrix: Soil

MS Sample Id: 662757-001 S

Prep Method: SW8015P

Date Prep: 05.28.2020

MSD Sample Id: 662757-001 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	999	955	96	931	93	70-135	3	35	mg/kg	05.28.2020 13:24	
Diesel Range Organics (DRO)	<50.0	999	1120	112	1030	103	70-135	8	35	mg/kg	05.28.2020 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		106		70-135	%	05.28.2020 13:24
o-Terphenyl	112		110		70-135	%	05.28.2020 13:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

MB Sample Id: 7704274-1-BLK

Matrix: Solid

LCS Sample Id: 7704274-1-BKS

Prep Method: SW5035A

Date Prep: 05.28.2020

LCSD Sample Id: 7704274-1-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	0.111	111	0.109	109	70-130	2	35	mg/kg	05.28.2020 13:55	
Toluene	<0.00200	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	05.28.2020 13:55	
Ethylbenzene	<0.00200	0.100	0.0987	99	0.0964	96	71-129	2	35	mg/kg	05.28.2020 13:55	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.197	99	70-135	2	35	mg/kg	05.28.2020 13:55	
o-Xylene	<0.00200	0.100	0.103	103	0.100	100	71-133	3	35	mg/kg	05.28.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		106		106		70-130	%	05.28.2020 13:55
4-Bromofluorobenzene	94		92		90		70-130	%	05.28.2020 13:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW5035A

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.106	107	0.118	118	70-130	11	35	mg/kg	05.28.2020 14:35	
Toluene	<0.00198	0.0992	0.103	104	0.113	113	70-130	9	35	mg/kg	05.28.2020 14:35	
Ethylbenzene	<0.00198	0.0992	0.0982	99	0.107	107	71-129	9	35	mg/kg	05.28.2020 14:35	
m,p-Xylenes	<0.00397	0.198	0.201	102	0.219	110	70-135	9	35	mg/kg	05.28.2020 14:35	
o-Xylene	<0.00198	0.0992	0.0995	100	0.110	110	71-133	10	35	mg/kg	05.28.2020 14:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		106		70-130	%	05.28.2020 14:35
4-Bromofluorobenzene	95		91		70-130	%	05.28.2020 14:35

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

Work Order No: 1207757

Page 1 of 1

www.asnicu.com		Page	of
Work Order Comments			
Program: UST/PST	☐ RRP	☐ Brownfields	☐ RRC ☐ Superfund ☐
State of Project:			
Reporting Level II	☐ Level III	☐ ST/UST	☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐	Adapt	☐ Other:

[illegible][illegible][illegible]

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Date/Time

5/5/20

5-01-2010



Certificate of Analysis Summary 662758

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 09:00

Report Date: 06.01.2020 11:41

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662758-001	662758-002				
	Field Id:	PH03B	PH03C				
	Depth:	6- ft	12- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	05.26.2020 10:15	05.26.2020 10:40				
BTEX by EPA 8021B	Extracted:	05.28.2020 15:17	05.28.2020 15:17				
	Analyzed:	05.28.2020 16:38	05.28.2020 16:59				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00202 0.00202	<0.00201 0.00201				
	Toluene	<0.00202 0.00202	<0.00201 0.00201				
	Ethylbenzene	<0.00202 0.00202	<0.00201 0.00201				
	m,p-Xylenes	<0.00403 0.00403	<0.00402 0.00402				
	o-Xylene	<0.00202 0.00202	<0.00201 0.00201				
	Total Xylenes	<0.00202 0.00202	<0.00201 0.00201				
	Total BTEX	<0.00202 0.00202	<0.00201 0.00201				
Chloride by EPA 300	Extracted:	05.28.2020 12:00	05.28.2020 12:00				
	Analyzed:	05.28.2020 13:24	05.28.2020 13:30				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	1720 49.7	868 9.90				
TPH by SW8015 Mod	Extracted:	05.28.2020 12:00	05.28.2020 12:00				
	Analyzed:	05.28.2020 14:05	05.28.2020 14:25				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<50.0 50.0				
	Diesel Range Organics (DRO)	<50.0 50.0	<50.0 50.0				
	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<50.0 50.0				
	Total GRO-DRO	<50.0 50.0	<50.0 50.0				
	Total TPH	<50.0 50.0	<50.0 50.0				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 662758

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.01.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.01.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **662758**

ADU Hondo

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 XENCO Report Number(s) 662758. 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 XENCO Laboratories. 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. 662758 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 XENCO Laboratories 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 662758

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH03B	S	05.26.2020 10:15	6 ft	662758-001
PH03C	S	05.26.2020 10:40	12 ft	662758-002



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 662758

Report Date: 06.01.2020
Date Received: 05.28.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 662758

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03B** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662758-001 Date Collected: 05.26.2020 10:15 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1720	49.7	mg/kg	05.28.2020 13:24		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 14:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 14:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 14:05	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 14:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 14:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	05.28.2020 14:05	
o-Terphenyl	84-15-1	96	%	70-135	05.28.2020 14:05	



Certificate of Analytical Results 662758

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03B**
Lab Sample Id: 662758-001

Matrix: Soil
Date Collected: 05.26.2020 10:15

Date Received: 05.28.2020 09:00
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.28.2020 16:38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.28.2020 16:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.28.2020 16:38		
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.28.2020 16:38		



Certificate of Analytical Results 662758

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03C** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662758-002 Date Collected: 05.26.2020 10:40 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	868	9.90	mg/kg	05.28.2020 13:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.28.2020 14:25	
o-Terphenyl	84-15-1	91	%	70-135	05.28.2020 14:25	



Certificate of Analytical Results 662758

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03C**
Lab Sample Id: 662758-002

Matrix: Soil
Date Collected: 05.26.2020 10:40

Date Received: 05.28.2020 09:00
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.28.2020 16:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.28.2020 16:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.28.2020 16:59	
4-Bromofluorobenzene	460-00-4	99	%	70-130	05.28.2020 16:59	



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

MB Sample Id: 7704270-1-BLK

Matrix: Solid

LCS Sample Id: 7704270-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704270-1-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	255	102	90-110	0	20	mg/kg	05.28.2020 12:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1150	201	1340	95	1330	90	90-110	1	20	mg/kg	05.28.2020 15:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662759-006

Matrix: Soil

MS Sample Id: 662759-006 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662759-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1820	202	2020	99	2030	104	90-110	0	20	mg/kg	05.28.2020 15:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

MB Sample Id: 7704312-1-BLK

Matrix: Solid

LCS Sample Id: 7704312-1-BKS

Prep Method: SW8015P

Date Prep: 05.28.2020

LCSD Sample Id: 7704312-1-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	1050	105	1230	123	70-135	16	35	mg/kg	05.28.2020 11:41	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1250	125	70-135	16	35	mg/kg	05.28.2020 11:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		120		126		70-135	%	05.28.2020 11:41
o-Terphenyl	133		105		118		70-135	%	05.28.2020 11:41

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Matrix: Solid

MB Sample Id: 7704312-1-BLK

Prep Method: SW8015P

Date Prep: 05.28.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.28.2020 11:21	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW8015P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 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)	<50.2	1000	1160	116	971	97	70-135	18	35	mg/kg	05.28.2020 13:24	
Diesel Range Organics (DRO)	<50.2	1000	1270	127	1050	105	70-135	19	35	mg/kg	05.28.2020 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		108		70-135	%	05.28.2020 13:24
o-Terphenyl	118		100		70-135	%	05.28.2020 13:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

MB Sample Id: 7704274-1-BLK

Matrix: Solid

LCS Sample Id: 7704274-1-BKS

Prep Method: SW5035A

Date Prep: 05.28.2020

LCSD Sample Id: 7704274-1-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	0.111	111	0.109	109	70-130	2	35	mg/kg	05.28.2020 13:55	
Toluene	<0.00200	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	05.28.2020 13:55	
Ethylbenzene	<0.00200	0.100	0.0987	99	0.0964	96	71-129	2	35	mg/kg	05.28.2020 13:55	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.197	99	70-135	2	35	mg/kg	05.28.2020 13:55	
o-Xylene	<0.00200	0.100	0.103	103	0.100	100	71-133	3	35	mg/kg	05.28.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		106		106		70-130	%	05.28.2020 13:55
4-Bromofluorobenzene	94		92		90		70-130	%	05.28.2020 13:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW5035A

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.106	107	0.118	118	70-130	11	35	mg/kg	05.28.2020 14:35	
Toluene	<0.00198	0.0992	0.103	104	0.113	113	70-130	9	35	mg/kg	05.28.2020 14:35	
Ethylbenzene	<0.00198	0.0992	0.0982	99	0.107	107	71-129	9	35	mg/kg	05.28.2020 14:35	
m,p-Xylenes	<0.00397	0.198	0.201	102	0.219	110	70-135	9	35	mg/kg	05.28.2020 14:35	
o-Xylene	<0.00198	0.0992	0.0995	100	0.110	110	71-133	10	35	mg/kg	05.28.2020 14:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		106		70-130	%	05.28.2020 14:35
4-Bromofluorobenzene	95		91		70-130	%	05.28.2020 14:35

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

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333 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)	Bill to: (if different) Use of: (if different)

Work Order No: 6662758

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:	slo@ltenv.com , dmoir@ltenv.com
Project Name:			

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

Project Name:	ABU Hondo	Turn Around	ANALYSIS REQUIRED			
Project Number:	012920017	Routine ☒				
P.O. Number:		Rush:				
Sampler's Name:	Spencer Lo	Due Date:				

SAMPLE RECEIPT					
Temperature Blank:	<u>Yes</u>	No	Wet Ice:	<u>Yes</u>	No
Temperature (°C):	<u>-8</u>				
Received Intact:	<u>yes</u>	No	Thermometer ID		
Cooler Custody Seals:	<u>Yes</u>	N/A	Correction Factor:	<u>-0.2</u>	
Sample Custody Seals:	<u>Yes</u>	N/A	Total Containers:	<u>2</u>	

[illegible]

Total	200.7 / 6010	200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

e: Signature of this document and relinquishment of samples constitutes a valid purchase order for the following items:

1631 / 245.1 / 7470 / 7471 : Hg

Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	5/28/2018: 10:00am		5/28/2020 9:00
			



Certificate of Analysis Summary 662759

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 09:00

Report Date: 06.01.2020 11:42

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	662759-001	662759-002	662759-003	662759-004	662759-005	662759-006
	<i>Field Id:</i>	PH01	PH01A	PH02	PH02A	PH03	PH03A
	<i>Depth:</i>	1- ft	4- ft	1- ft	4- ft	1- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	05.26.2020 09:15	05.26.2020 09:30	05.26.2020 09:35	05.26.2020 09:50	05.26.2020 09:55	05.26.2020 10:10
BTEX by EPA 8021B	<i>Extracted:</i>	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17
	<i>Analyzed:</i>	05.28.2020 17:19	05.28.2020 17:40	05.28.2020 18:00	05.28.2020 18:21	05.28.2020 18:41	05.28.2020 19:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
m,p-Xylenes		<0.00404 0.00404	<0.00402 0.00402	<0.00396 0.00396	<0.00399 0.00399	<0.00402 0.00402	<0.00402 0.00402
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00
	<i>Analyzed:</i>	05.28.2020 13:47	05.28.2020 13:53	05.28.2020 13:59	05.28.2020 14:04	05.28.2020 14:10	05.28.2020 14:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1020 9.98	466 10.1	2420 50.1	396 10.0	949 10.0	1820 50.0
TPH by SW8015 Mod	<i>Extracted:</i>	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00
	<i>Analyzed:</i>	05.28.2020 14:25	05.28.2020 14:46	05.28.2020 14:46	05.28.2020 15:07	05.28.2020 16:21	05.28.2020 15:27
	<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)		<50.0 50.0	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.1 50.1	<49.8 49.8	<50.1 50.1	220 50.0	195 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0
Total GRO-DRO		<50.0 50.0	<50.1 50.1	<49.8 49.8	<50.1 50.1	220 50.0	195 50.0
Total TPH		<50.0 50.0	<50.1 50.1	<49.8 49.8	<50.1 50.1	220 50.0	195 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 662759

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 09:00

Report Date: 06.01.2020 11:42

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662759-007	662759-008	662759-009	662759-010		
	Field Id:	PH04	PH04A	PH05	PH05A		
	Depth:	1- ft	4- ft	1- ft	4- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	05.26.2020 11:10	05.26.2020 11:15	05.26.2020 11:30	05.26.2020 11:40		
BTEX by EPA 8021B	Extracted:	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17	05.28.2020 15:17		
	Analyzed:	05.28.2020 20:03	05.28.2020 20:23	05.28.2020 20:44	05.28.2020 21:04		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
m,p-Xylenes		<0.00399 0.00399	<0.00401 0.00401	<0.00402 0.00402	<0.00404 0.00404		
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Chloride by EPA 300	Extracted:	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00		
	Analyzed:	05.28.2020 14:33	05.28.2020 14:39	05.28.2020 14:59	05.28.2020 15:06		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		1590 49.9	2070 50.2	2630 101	1040 10.0		
TPH by SW8015 Mod	Extracted:	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00	05.28.2020 12:00		
	Analyzed:	05.28.2020 15:07	05.28.2020 15:27	05.28.2020 15:48	05.28.2020 15:48		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.2 50.2		
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.2 50.2		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.2 50.2		
Total GRO-DRO		<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.2 50.2		
Total TPH		<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.2 50.2		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 662759

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.01.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.01.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **662759**

ADU Hondo

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 XENCO Report Number(s) 662759. 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 XENCO Laboratories. 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. 662759 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 662759****LT Environmental, Inc., Arvada, CO**

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	05.26.2020 09:15	1 ft	662759-001
PH01A	S	05.26.2020 09:30	4 ft	662759-002
PH02	S	05.26.2020 09:35	1 ft	662759-003
PH02A	S	05.26.2020 09:50	4 ft	662759-004
PH03	S	05.26.2020 09:55	1 ft	662759-005
PH03A	S	05.26.2020 10:10	4 ft	662759-006
PH04	S	05.26.2020 11:10	1 ft	662759-007
PH04A	S	05.26.2020 11:15	4 ft	662759-008
PH05	S	05.26.2020 11:30	1 ft	662759-009
PH05A	S	05.26.2020 11:40	4 ft	662759-010



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo

Project ID: 012920017
Work Order Number(s): 662759

Report Date: 06.01.2020
Date Received: 05.28.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3127285 TPH by SW8015 Mod

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

Samples affected are: 662759-010.



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH01** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-001 Date Collected: 05.26.2020 09:15 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1020	9.98	mg/kg	05.28.2020 13:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 14:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	05.28.2020 14:25	
o-Terphenyl	84-15-1	93	%	70-135	05.28.2020 14:25	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH01**
Lab Sample Id: 662759-001

Matrix: Soil
Date Collected: 05.26.2020 09:15

Date Received: 05.28.2020 09:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.28.2020 17:19	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.28.2020 17:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.28.2020 17:19		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.28.2020 17:19		



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH01A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-002 Date Collected: 05.26.2020 09:30 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	466	10.1	mg/kg	05.28.2020 13:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.28.2020 14:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.28.2020 14:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.28.2020 14:46	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.28.2020 14:46	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.28.2020 14:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	05.28.2020 14:46	
o-Terphenyl	84-15-1	98	%	70-135	05.28.2020 14:46	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH01A**
Lab Sample Id: 662759-002

Matrix: Soil
Date Collected: 05.26.2020 09:30

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.28.2020 17:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.28.2020 17:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.28.2020 17:40		
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.28.2020 17:40		



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH02** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-003 Date Collected: 05.26.2020 09:35 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2420	50.1	mg/kg	05.28.2020 13:59		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.28.2020 14:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.28.2020 14:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.28.2020 14:46	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.28.2020 14:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.28.2020 14:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.28.2020 14:46	
o-Terphenyl	84-15-1	93	%	70-135	05.28.2020 14:46	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH02**
Lab Sample Id: 662759-003

Matrix: Soil
Date Collected: 05.26.2020 09:35

Date Received: 05.28.2020 09:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.28.2020 18:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.28.2020 18:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.28.2020 18:00		
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.28.2020 18:00		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH02A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-004 Date Collected: 05.26.2020 09:50 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	396	10.0	mg/kg	05.28.2020 14:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.28.2020 15:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.28.2020 15:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.28.2020 15:07	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.28.2020 15:07	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.28.2020 15:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	05.28.2020 15:07	
o-Terphenyl	84-15-1	100	%	70-135	05.28.2020 15:07	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH02A**
Lab Sample Id: 662759-004

Matrix: Soil
Date Collected: 05.26.2020 09:50

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.28.2020 18:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.28.2020 18:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	05.28.2020 18:21	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.28.2020 18:21	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-005 Date Collected: 05.26.2020 09:55 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	949	10.0	mg/kg	05.28.2020 14:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	220	50.0	mg/kg	05.28.2020 16:21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 16:21	U	1
Total GRO-DRO	PHC628	220	50.0	mg/kg	05.28.2020 16:21		1
Total TPH	PHC635	220	50.0	mg/kg	05.28.2020 16:21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.28.2020 16:21	
o-Terphenyl	84-15-1	99	%	70-135	05.28.2020 16:21	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03**
Lab Sample Id: 662759-005

Matrix: Soil
Date Collected: 05.26.2020 09:55

Date Received: 05.28.2020 09:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.28.2020 18:41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.28.2020 18:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	05.28.2020 18:41	
4-Bromofluorobenzene	460-00-4	90	%	70-130	05.28.2020 18:41	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-006 Date Collected: 05.26.2020 10:10 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1820	50.0	mg/kg	05.28.2020 14:16		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	195	50.0	mg/kg	05.28.2020 15:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Total GRO-DRO	PHC628	195	50.0	mg/kg	05.28.2020 15:27		1
Total TPH	PHC635	195	50.0	mg/kg	05.28.2020 15:27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	05.28.2020 15:27	
o-Terphenyl	84-15-1	94	%	70-135	05.28.2020 15:27	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03A**
Lab Sample Id: 662759-006

Matrix: Soil
Date Collected: 05.26.2020 10:10

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127347

Prep Method: SW5035A

% Moisture:

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.28.2020 19:42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.28.2020 19:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.28.2020 19:42		
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.28.2020 19:42		



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH04** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-007 Date Collected: 05.26.2020 11:10 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1590	49.9	mg/kg	05.28.2020 14:33		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 15:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 15:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 15:07	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 15:07	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 15:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	05.28.2020 15:07	
o-Terphenyl	84-15-1	92	%	70-135	05.28.2020 15:07	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH04**
Lab Sample Id: 662759-007

Matrix: Soil
Date Collected: 05.26.2020 11:10

Date Received: 05.28.2020 09:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127347

Prep Method: SW5035A

% Moisture:

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.28.2020 20:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.28.2020 20:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.28.2020 20:03		
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.28.2020 20:03		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH04A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-008 Date Collected: 05.26.2020 11:15 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2070	50.2	mg/kg	05.28.2020 14:39		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 15:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	05.28.2020 15:27	
o-Terphenyl	84-15-1	122	%	70-135	05.28.2020 15:27	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH04A**
Lab Sample Id: 662759-008

Matrix: Soil
Date Collected: 05.26.2020 11:15

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127347

Prep Method: SW5035A

% Moisture:

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.28.2020 20:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.28.2020 20:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.28.2020 20:23		
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.28.2020 20:23		



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-009 Date Collected: 05.26.2020 11:30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2630	101	mg/kg	05.28.2020 14:59		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127284

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.28.2020 15:48	
o-Terphenyl	84-15-1	92	%	70-135	05.28.2020 15:48	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05**
Lab Sample Id: 662759-009

Matrix: Soil
Date Collected: 05.26.2020 11:30

Date Received: 05.28.2020 09:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Seq Number: 3127347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.28.2020 20:44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.28.2020 20:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.28.2020 20:44		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.28.2020 20:44		



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05A** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662759-010 Date Collected: 05.26.2020 11:40 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1040	10.0	mg/kg	05.28.2020 15:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 15:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	137	%	70-135	05.28.2020 15:48	**
o-Terphenyl	84-15-1	128	%	70-135	05.28.2020 15:48	



Certificate of Analytical Results 662759

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05A**
Lab Sample Id: 662759-010

Matrix: Soil
Date Collected: 05.26.2020 11:40

Date Received: 05.28.2020 09:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127347

Prep Method: SW5035A

% Moisture:

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.28.2020 21:04	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.28.2020 21:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.28.2020 21:04		
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.28.2020 21:04		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

MB Sample Id: 7704270-1-BLK

Matrix: Solid

LCS Sample Id: 7704270-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704270-1-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	255	102	90-110	0	20	mg/kg	05.28.2020 12:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1150	201	1340	95	1330	90	90-110	1	20	mg/kg	05.28.2020 15:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662759-006

Matrix: Soil

MS Sample Id: 662759-006 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662759-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1820	202	2020	99	2030	104	90-110	0	20	mg/kg	05.28.2020 15:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

MB Sample Id: 7704311-1-BLK

Matrix: Solid

LCS Sample Id: 7704311-1-BKS

Prep Method: SW8015P

Date Prep: 05.28.2020

LCSD Sample Id: 7704311-1-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	935	94	932	93	70-135	0	35	mg/kg	05.28.2020 11:41	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1080	108	70-135	1	35	mg/kg	05.28.2020 11:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		129		124		70-135	%	05.28.2020 11:41
o-Terphenyl	132		133		132		70-135	%	05.28.2020 11:41

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

MB Sample Id: 7704312-1-BLK

Matrix: Solid

LCS Sample Id: 7704312-1-BKS

Prep Method: SW8015P

Date Prep: 05.28.2020

LCSD Sample Id: 7704312-1-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	1050	105	1230	123	70-135	16	35	mg/kg	05.28.2020 11:41	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1250	125	70-135	16	35	mg/kg	05.28.2020 11:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		120		126		70-135	%	05.28.2020 11:41
o-Terphenyl	133		105		118		70-135	%	05.28.2020 11:41

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

Matrix: Solid

Prep Method: SW8015P

Date Prep: 05.28.2020

MB Sample Id: 7704311-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.28.2020 11:21	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Matrix: Solid

Prep Method: SW8015P

Date Prep: 05.28.2020

MB Sample Id: 7704312-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.28.2020 11:21	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127284

Matrix: Soil

Prep Method: SW8015P

Date Prep: 05.28.2020

Parent Sample Id: 662757-001

MS Sample Id: 662757-001 S

MSD Sample Id: 662757-001 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	999	955	96	931	93	70-135	3	35	mg/kg	05.28.2020 13:24	
Diesel Range Organics (DRO)	<50.0	999	1120	112	1030	103	70-135	8	35	mg/kg	05.28.2020 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		106		70-135	%	05.28.2020 13:24
o-Terphenyl	112		110		70-135	%	05.28.2020 13:24

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Matrix: Soil

Prep Method: SW8015P

Date Prep: 05.28.2020

Parent Sample Id: 662755-001

MS Sample Id: 662755-001 S

MSD Sample Id: 662755-001 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)	<50.2	1000	1160	116	971	97	70-135	18	35	mg/kg	05.28.2020 13:24	
Diesel Range Organics (DRO)	<50.2	1000	1270	127	1050	105	70-135	19	35	mg/kg	05.28.2020 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		108		70-135	%	05.28.2020 13:24
o-Terphenyl	118		100		70-135	%	05.28.2020 13:24

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



LT Environmental, Inc.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

MB Sample Id: 7704274-1-BLK

Matrix: Solid

LCS Sample Id: 7704274-1-BKS

Prep Method: SW5035A

Date Prep: 05.28.2020

LCSD Sample Id: 7704274-1-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	0.111	111	0.109	109	70-130	2	35	mg/kg	05.28.2020 13:55	
Toluene	<0.00200	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	05.28.2020 13:55	
Ethylbenzene	<0.00200	0.100	0.0987	99	0.0964	96	71-129	2	35	mg/kg	05.28.2020 13:55	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.197	99	70-135	2	35	mg/kg	05.28.2020 13:55	
o-Xylene	<0.00200	0.100	0.103	103	0.100	100	71-133	3	35	mg/kg	05.28.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		106		106		70-130	%	05.28.2020 13:55
4-Bromofluorobenzene	94		92		90		70-130	%	05.28.2020 13:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW5035A

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.106	107	0.118	118	70-130	11	35	mg/kg	05.28.2020 14:35	
Toluene	<0.00198	0.0992	0.103	104	0.113	113	70-130	9	35	mg/kg	05.28.2020 14:35	
Ethylbenzene	<0.00198	0.0992	0.0982	99	0.107	107	71-129	9	35	mg/kg	05.28.2020 14:35	
m,p-Xylenes	<0.00397	0.198	0.201	102	0.219	110	70-135	9	35	mg/kg	05.28.2020 14:35	
o-Xylene	<0.00198	0.0992	0.0995	100	0.110	110	71-133	10	35	mg/kg	05.28.2020 14:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		106		70-130	%	05.28.2020 14:35
4-Bromofluorobenzene	95		91		70-130	%	05.28.2020 14:35

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



Chain of Custody

Work Order No: 1662759

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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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

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

ANALYSIS REQUEST

Work Order Notes

Project Name:	ADU Hondo	Turn Around	
Project Number:	012920017	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.8		☒	☐		☒	☐
Received Inlact:	Yes	No			Thermometer ID	T-NM-007	
Cooler Custody Seals:	Yes	No			Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No			Total Containers:	10	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers

PH01	S	5-26-2020	915	1'	1
PH01A	S	5-26-2020	930	4'	1
PH02	S	5-26-2020	935	1'	1
PH02A	S	5-26-2020	950	4'	1
PH03	S	5-26-2020	955	1'	1
PH03A	S	5-26-2020	1010	4'	1
PH04	S	5-26-2020	1110	2'	1
PH04A	S	5-26-2020	1115	4'	1
PH05	S	5-26-2020	1130	2'	1
PH05A	S	5-26-2020	1140	4'	1

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 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

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Received by: (Signature)

Date/Time

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Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time



Certificate of Analysis Summary 662755

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 09:00

Report Date: 06.01.2020 11:43

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662755-001					
	Field Id:	PH03 D					
	Depth:	20- ft					
	Matrix:	SOIL					
	Sampled:	05.27.2020 14:25					
BTEX by EPA 8021B	Extracted:	05.28.2020 15:17					
	Analyzed:	05.28.2020 15:37					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	Extracted:	05.28.2020 12:00					
	Analyzed:	05.28.2020 12:55					
	Units/RL:	mg/kg RL					
Chloride		1150 9.96					
TPH by SW8015 Mod	Extracted:	05.28.2020 12:00					
	Analyzed:	05.28.2020 13:03					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0					
Diesel Range Organics (DRO)		<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0					
Total GRO-DRO		<50.0 50.0					
Total TPH		<50.0 50.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 662755

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.01.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.01.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **662755**

ADU Hondo

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 XENCO Report Number(s) 662755. 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 XENCO Laboratories. 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. 662755 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 662755

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH03 D	S	05.27.2020 14:25	20 ft	662755-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017

Work Order Number(s): 662755

Report Date: 06.01.2020

Date Received: 05.28.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 662755

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03 D** Matrix: Soil Date Received: 05.28.2020 09:00
 Lab Sample Id: 662755-001 Date Collected: 05.27.2020 14:25 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1150	9.96	mg/kg	05.28.2020 12:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 05.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3127285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.28.2020 13:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 13:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 13:03	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 13:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 13:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	05.28.2020 13:03	
o-Terphenyl	84-15-1	96	%	70-135	05.28.2020 13:03	



Certificate of Analytical Results 662755

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH03 D**
Lab Sample Id: 662755-001

Matrix: Soil
Date Collected: 05.27.2020 14:25

Date Received: 05.28.2020 09:00
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127347

Prep Method: SW5035A

% Moisture:

Date Prep: 05.28.2020 15:17

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.28.2020 15:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.28.2020 15:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.28.2020 15:37		
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.28.2020 15:37		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

MB Sample Id: 7704270-1-BLK

Matrix: Solid

LCS Sample Id: 7704270-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704270-1-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	255	102	90-110	0	20	mg/kg	05.28.2020 12:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1150	201	1340	95	1330	90	90-110	1	20	mg/kg	05.28.2020 15:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3127350

Parent Sample Id: 662759-006

Matrix: Soil

MS Sample Id: 662759-006 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662759-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1820	202	2020	99	2030	104	90-110	0	20	mg/kg	05.28.2020 15:27	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

MB Sample Id: 7704312-1-BLK

Matrix: Solid

LCS Sample Id: 7704312-1-BKS

Prep Method: SW8015P

Date Prep: 05.28.2020

LCSD Sample Id: 7704312-1-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	1050	105	1230	123	70-135	16	35	mg/kg	05.28.2020 11:41	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1250	125	70-135	16	35	mg/kg	05.28.2020 11:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		120		126		70-135	%	05.28.2020 11:41
o-Terphenyl	133		105		118		70-135	%	05.28.2020 11:41

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Matrix: Solid

MB Sample Id: 7704312-1-BLK

Prep Method: SW8015P

Date Prep: 05.28.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.28.2020 11:21	

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.

ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127285

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW8015P

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 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)	<50.2	1000	1160	116	971	97	70-135	18	35	mg/kg	05.28.2020 13:24	
Diesel Range Organics (DRO)	<50.2	1000	1270	127	1050	105	70-135	19	35	mg/kg	05.28.2020 13:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		108		70-135	%	05.28.2020 13:24
o-Terphenyl	118		100		70-135	%	05.28.2020 13:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

MB Sample Id: 7704274-1-BLK

Matrix: Solid

LCS Sample Id: 7704274-1-BKS

Prep Method: SW5035A

Date Prep: 05.28.2020

LCSD Sample Id: 7704274-1-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	0.111	111	0.109	109	70-130	2	35	mg/kg	05.28.2020 13:55	
Toluene	<0.00200	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	05.28.2020 13:55	
Ethylbenzene	<0.00200	0.100	0.0987	99	0.0964	96	71-129	2	35	mg/kg	05.28.2020 13:55	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.197	99	70-135	2	35	mg/kg	05.28.2020 13:55	
o-Xylene	<0.00200	0.100	0.103	103	0.100	100	71-133	3	35	mg/kg	05.28.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		106		106		70-130	%	05.28.2020 13:55
4-Bromofluorobenzene	94		92		90		70-130	%	05.28.2020 13:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127347

Parent Sample Id: 662755-001

Matrix: Soil

MS Sample Id: 662755-001 S

Prep Method: SW5035A

Date Prep: 05.28.2020

MSD Sample Id: 662755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.106	107	0.118	118	70-130	11	35	mg/kg	05.28.2020 14:35	
Toluene	<0.00198	0.0992	0.103	104	0.113	113	70-130	9	35	mg/kg	05.28.2020 14:35	
Ethylbenzene	<0.00198	0.0992	0.0982	99	0.107	107	71-129	9	35	mg/kg	05.28.2020 14:35	
m,p-Xylenes	<0.00397	0.198	0.201	102	0.219	110	70-135	9	35	mg/kg	05.28.2020 14:35	
o-Xylene	<0.00198	0.0992	0.0995	100	0.110	110	71-133	10	35	mg/kg	05.28.2020 14:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		106		70-130	%	05.28.2020 14:35
4-Bromofluorobenzene	95		91		70-130	%	05.28.2020 14:35

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

Work Order No.:

6602-755

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Page 1 of 1

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

[illegible]

Number of Containers					
A 8015)					
PA 0=8021)					
(EPA 300.0)					
TAT starts the day received by the					

[illegible][illegible]

TCLP / SPLP 6010: 8RCBA Sb As Ba Be Cd Cr Co Cu Pb Mn Ni C

[illegible]

service. Xencro 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 Xencro. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencro, 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>Sehe</i>	<i>Willard</i>	5/25/2014 5:00am	<i>Willard</i>	<i>Willard</i>	5/28/2014 9:00



Certificate of Analysis Summary 663033

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 06.01.2020 08:45

Report Date: 06.02.2020 11:13

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663033-001	663033-002	663033-003	663033-004	663033-005	663033-006
	Field Id:	FS01	FS02	FS03	FS04	FS05	FS06
	Depth:	2- ft	2- ft	2- ft	3- ft	3- ft	3- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.28.2020 08:45	05.27.2020 14:10	05.28.2020 09:00	05.27.2020 14:50	05.27.2020 15:00	05.27.2020 15:10
BTEX by EPA 8021B	Extracted:	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28
	Analyzed:	06.01.2020 13:43	06.01.2020 14:03	06.01.2020 14:24	06.01.2020 14:44	06.01.2020 15:04	06.01.2020 19:09
	Units/RL:	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	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		0.119 0.00200	0.0249 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		0.0352 0.00200	0.0162 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		0.105 0.00401	0.0143 0.00397	<0.00401 0.00401	<0.00404 0.00404	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		0.0348 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		0.140 0.00200	0.0143 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		0.294 0.00200	0.0554 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	Extracted:	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29
	Analyzed:	** * * * *	06.01.2020 14:38	06.01.2020 14:45	06.01.2020 14:52	06.01.2020 14:59	06.01.2020 15:20
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		344 10.0	200 9.92	451 10.0	376 9.92	469 9.98	325 9.92
TPH by SW8015 Mod	Extracted:	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00
	Analyzed:	06.01.2020 13:25	06.01.2020 14:47	06.01.2020 15:08	06.01.2020 14:27	06.01.2020 14:47	06.01.2020 15:08
	Units/RL:	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	<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.1 50.1	<49.8 49.8
Diesel Range Organics (DRO)		151 50.1	331 49.9	<50.1 50.1	<50.2 50.2	<50.1 50.1	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	58.0 49.9	<50.1 50.1	<50.2 50.2	<50.1 50.1	<49.8 49.8
Total GRO-DRO		151 50.1	331 49.9	<50.1 50.1	<50.2 50.2	<50.1 50.1	<49.8 49.8
Total TPH		151 50.1	389 49.9	<50.1 50.1	<50.2 50.2	<50.1 50.1	<49.8 49.8

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 663033

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 06.01.2020 08:45

Report Date: 06.02.2020 11:13

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663033-007					
	Field Id:	FS07					
	Depth:	3- ft					
	Matrix:	SOIL					
	Sampled:	05.27.2020 15:20					
BTEX by EPA 8021B	Extracted:	06.01.2020 10:28					
	Analyzed:	06.01.2020 15:45					
	Units/RL:	mg/kg RL					
Benzene		<0.00202 0.00202					
Toluene		<0.00202 0.00202					
Ethylbenzene		<0.00202 0.00202					
m,p-Xylenes		<0.00403 0.00403					
o-Xylene		<0.00202 0.00202					
Total Xylenes		<0.00202 0.00202					
Total BTEX		<0.00202 0.00202					
Chloride by EPA 300	Extracted:	06.01.2020 14:29					
	Analyzed:	06.01.2020 15:27					
	Units/RL:	mg/kg RL					
Chloride		342 10.0					
TPH by SW8015 Mod	Extracted:	06.01.2020 12:00					
	Analyzed:	06.01.2020 13:25					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1					
Diesel Range Organics (DRO)		<50.1 50.1					
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1					
Total GRO-DRO		<50.1 50.1					
Total TPH		<50.1 50.1					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663033

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.02.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.02.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663033**

ADU Hondo

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 XENCO Report Number(s) 663033. 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 XENCO Laboratories. 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. 663033 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663033****LT Environmental, Inc., Arvada, CO**

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	05.28.2020 08:45	2 ft	663033-001
FS02	S	05.27.2020 14:10	2 ft	663033-002
FS03	S	05.28.2020 09:00	2 ft	663033-003
FS04	S	05.27.2020 14:50	3 ft	663033-004
FS05	S	05.27.2020 15:00	3 ft	663033-005
FS06	S	05.27.2020 15:10	3 ft	663033-006
FS07	S	05.27.2020 15:20	3 ft	663033-007



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663033

Report Date: 06.02.2020
Date Received: 06.01.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS01** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-001 Date Collected: 05.28.2020 08:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	344	10.0	mg/kg	06.01.2020 14:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	151	50.1	mg/kg	06.01.2020 13:25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Total GRO-DRO	PHC628	151	50.1	mg/kg	06.01.2020 13:25		1
Total TPH	PHC635	151	50.1	mg/kg	06.01.2020 13:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	06.01.2020 13:25	
o-Terphenyl	84-15-1	96	%	70-135	06.01.2020 13:25	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS01**
Lab Sample Id: 663033-001

Matrix: Soil
Date Collected: 05.28.2020 08:45

Date Received: 06.01.2020 08:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.01.2020 13:43	U	1
Toluene	108-88-3	0.119	0.00200	mg/kg	06.01.2020 13:43		1
Ethylbenzene	100-41-4	0.0352	0.00200	mg/kg	06.01.2020 13:43		1
m,p-Xylenes	179601-23-1	0.105	0.00401	mg/kg	06.01.2020 13:43		1
o-Xylene	95-47-6	0.0348	0.00200	mg/kg	06.01.2020 13:43		1
Total Xylenes	1330-20-7	0.140	0.00200	mg/kg	06.01.2020 13:43		1
Total BTEX		0.294	0.00200	mg/kg	06.01.2020 13:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	06.01.2020 13:43	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.01.2020 13:43	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS02** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-002 Date Collected: 05.27.2020 14:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	200	9.92	mg/kg	06.01.2020 14:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.01.2020 14:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	331	49.9	mg/kg	06.01.2020 14:47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	58.0	49.9	mg/kg	06.01.2020 14:47		1
Total GRO-DRO	PHC628	331	49.9	mg/kg	06.01.2020 14:47		1
Total TPH	PHC635	389	49.9	mg/kg	06.01.2020 14:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	06.01.2020 14:47	
o-Terphenyl	84-15-1	101	%	70-135	06.01.2020 14:47	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS02**
Lab Sample Id: 663033-002

Matrix: Soil
Date Collected: 05.27.2020 14:10

Date Received: 06.01.2020 08:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.01.2020 14:03	U	1
Toluene	108-88-3	0.0249	0.00198	mg/kg	06.01.2020 14:03		1
Ethylbenzene	100-41-4	0.0162	0.00198	mg/kg	06.01.2020 14:03		1
m,p-Xylenes	179601-23-1	0.0143	0.00397	mg/kg	06.01.2020 14:03		1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.01.2020 14:03	U	1
Total Xylenes	1330-20-7	0.0143	0.00198	mg/kg	06.01.2020 14:03		1
Total BTEX		0.0554	0.00198	mg/kg	06.01.2020 14:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.01.2020 14:03	
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.01.2020 14:03	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS03** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-003 Date Collected: 05.28.2020 09:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	451	10.0	mg/kg	06.01.2020 14:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.01.2020 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 15:08	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.01.2020 15:08	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.01.2020 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	06.01.2020 15:08	
o-Terphenyl	84-15-1	94	%	70-135	06.01.2020 15:08	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS03**
Lab Sample Id: 663033-003

Matrix: Soil
Date Collected: 05.28.2020 09:00

Date Received: 06.01.2020 08:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.01.2020 14:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.01.2020 14:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.01.2020 14:24	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.01.2020 14:24	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS04** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-004 Date Collected: 05.27.2020 14:50 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	376	9.92	mg/kg	06.01.2020 14:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.01.2020 14:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.01.2020 14:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.01.2020 14:27	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.01.2020 14:27	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.01.2020 14:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.01.2020 14:27	
o-Terphenyl	84-15-1	95	%	70-135	06.01.2020 14:27	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS04**
Lab Sample Id: 663033-004

Matrix: Soil
Date Collected: 05.27.2020 14:50

Date Received: 06.01.2020 08:45
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.01.2020 14:44	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.01.2020 14:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.01.2020 14:44		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.01.2020 14:44		



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS05** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-005 Date Collected: 05.27.2020 15:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	469	9.98	mg/kg	06.01.2020 14:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 14:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.01.2020 14:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 14:47	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.01.2020 14:47	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.01.2020 14:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.01.2020 14:47	
o-Terphenyl	84-15-1	94	%	70-135	06.01.2020 14:47	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS05**
Lab Sample Id: 663033-005

Matrix: Soil
Date Collected: 05.27.2020 15:00

Date Received: 06.01.2020 08:45
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.01.2020 15:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.01.2020 15:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.01.2020 15:04		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.01.2020 15:04		



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS06** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-006 Date Collected: 05.27.2020 15:10 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	325	9.92	mg/kg	06.01.2020 15:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.01.2020 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.01.2020 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.01.2020 15:08	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.01.2020 15:08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.01.2020 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	06.01.2020 15:08	
o-Terphenyl	84-15-1	93	%	70-135	06.01.2020 15:08	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS06**
Lab Sample Id: 663033-006

Matrix: Soil
Date Collected: 05.27.2020 15:10

Date Received: 06.01.2020 08:45
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.01.2020 19:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.01.2020 19:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	06.01.2020 19:09		
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.01.2020 19:09		



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS07** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663033-007 Date Collected: 05.27.2020 15:20 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	342	10.0	mg/kg	06.01.2020 15:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.01.2020 13:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	06.01.2020 13:25	
o-Terphenyl	84-15-1	92	%	70-135	06.01.2020 13:25	



Certificate of Analytical Results 663033

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS07**
Lab Sample Id: 663033-007

Matrix: Soil
Date Collected: 05.27.2020 15:20

Date Received: 06.01.2020 08:45
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.01.2020 15:45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.01.2020 15:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.01.2020 15:45	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.01.2020 15:45	



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.

ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

MB Sample Id: 7704530-1-BLK

Matrix: Solid

LCS Sample Id: 7704530-1-BKS

Prep Method: E300P

Date Prep: 06.01.2020

LCSD Sample Id: 7704530-1-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	250	100	250	100	90-110	0	20	mg/kg	06.01.2020 14:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

Parent Sample Id: 663033-001

Matrix: Soil

MS Sample Id: 663033-001 S

Prep Method: E300P

Date Prep: 06.01.2020

MSD Sample Id: 663033-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	200	527	92	527	92	90-110	0	20	mg/kg	06.01.2020 14:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

Parent Sample Id: 663035-004

Matrix: Soil

MS Sample Id: 663035-004 S

Prep Method: E300P

Date Prep: 06.01.2020

MSD Sample Id: 663035-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	993	199	1180	94	1180	94	90-110	0	20	mg/kg	06.01.2020 16:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

MB Sample Id: 7704536-1-BLK

Matrix: Solid

LCS Sample Id: 7704536-1-BKS

Prep Method: SW8015P

Date Prep: 06.01.2020

LCSD Sample Id: 7704536-1-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	941	94	925	93	70-135	2	35	mg/kg	06.01.2020 12:44	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1010	101	70-135	1	35	mg/kg	06.01.2020 12:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		114		111		70-135	%	06.01.2020 12:44
o-Terphenyl	94		107		105		70-135	%	06.01.2020 12:44

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

MB Sample Id: 7704537-1-BLK

Matrix: Solid

LCS Sample Id: 7704537-1-BKS

Prep Method: SW8015P

Date Prep: 06.01.2020

LCSD Sample Id: 7704537-1-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	989	99	970	97	70-135	2	35	mg/kg	06.01.2020 12:44	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	992	99	70-135	4	35	mg/kg	06.01.2020 12:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		118		130		70-135	%	06.01.2020 12:44
o-Terphenyl	80		102		101		70-135	%	06.01.2020 12:44

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.01.2020

MB Sample Id: 7704536-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.01.2020 12:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.01.2020

MB Sample Id: 7704537-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.01.2020 12:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.01.2020

Parent Sample Id: 663033-001

MS Sample Id: 663033-001 S

MSD Sample Id: 663033-001 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)	<50.2	1000	981	98	998	100	70-135	2	35	mg/kg	06.01.2020 13:45	
Diesel Range Organics (DRO)	151	1000	1200	105	1010	86	70-135	17	35	mg/kg	06.01.2020 13:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		113		70-135	%	06.01.2020 13:45
o-Terphenyl	104		104		70-135	%	06.01.2020 13:45

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.01.2020

Parent Sample Id: 663033-007

MS Sample Id: 663033-007 S

MSD Sample Id: 663033-007 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	1110	111	1010	101	70-135	9	35	mg/kg	06.01.2020 13:45	
Diesel Range Organics (DRO)	<50.2	1000	1140	114	1050	105	70-135	8	35	mg/kg	06.01.2020 13:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		118		70-135	%	06.01.2020 13:45
o-Terphenyl	106		101		70-135	%	06.01.2020 13:45

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127638

MB Sample Id: 7704529-1-BLK

Matrix: Solid

LCS Sample Id: 7704529-1-BKS

Prep Method: SW5035A

Date Prep: 06.01.2020

LCSD Sample Id: 7704529-1-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	0.111	111	70-130	2	35	mg/kg	06.01.2020 12:01	
Toluene	<0.00200	0.100	0.105	105	0.106	106	70-130	1	35	mg/kg	06.01.2020 12:01	
Ethylbenzene	<0.00200	0.100	0.0988	99	0.100	100	71-129	1	35	mg/kg	06.01.2020 12:01	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.208	104	70-135	2	35	mg/kg	06.01.2020 12:01	
o-Xylene	<0.00200	0.100	0.102	102	0.105	105	71-133	3	35	mg/kg	06.01.2020 12:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		107		109		70-130	%	06.01.2020 12:01
4-Bromofluorobenzene	96		89		92		70-130	%	06.01.2020 12:01

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127638

Parent Sample Id: 663033-001

Matrix: Soil

MS Sample Id: 663033-001 S

Prep Method: SW5035A

Date Prep: 06.01.2020

MSD Sample Id: 663033-001 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	0.105	105	0.106	105	70-130	1	35	mg/kg	06.01.2020 17:07	
Toluene	0.119	0.100	0.202	83	0.202	82	70-130	0	35	mg/kg	06.01.2020 17:07	
Ethylbenzene	0.0352	0.100	0.125	90	0.116	80	71-129	7	35	mg/kg	06.01.2020 17:07	
m,p-Xylenes	0.105	0.200	0.297	96	0.290	92	70-135	2	35	mg/kg	06.01.2020 17:07	
o-Xylene	0.0348	0.100	0.129	94	0.130	94	71-133	1	35	mg/kg	06.01.2020 17:07	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	06.01.2020 17:07
4-Bromofluorobenzene	92		92		70-130	%	06.01.2020 17:07

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



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: 1631033

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:	slm@ltenv.com, dmoir@ltenv.com

Project Name:	ADU Hondo	Turn Around	☒ Routine
Project Number:	012920017	Rush:	
P.O. Number:		Due Date:	
Sampler's Name:	Spencer Lo		

SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
	Temperature (°C):	1.8	Thermometer ID: TMM007	
	Received Intact:	Yes ☒ No ☐	Correction Factor: -0.2	
	Cooler Custody Seals:	Yes ☒ No ☐	Total Containers: 7	
	Sample Custody Seals:	Yes ☒ No ☐		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E	BTEX (	Chloride	Sample Comments										
F501	S	5-28-20	845	2'	1	X	X	X											
F502		5-27-20	1410	2'															
F502		5-28-20	900	2'															
F504		5-27-20	1450	3'															
F505		5-27-20	1500	3'															
F506		5-27-20	1510	3'															
F507		5-27-20	1520	3'															

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>	6/1/20 15:00am	<i>[Signature]</i>	<i>[Signature]</i>	6/1/20 08:45



Certificate of Analysis Summary 663035

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 06.01.2020 08:45

Report Date: 06.02.2020 11:14

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663035-001	663035-002	663035-003	663035-004	663035-005	
	Field Id:	SW01	SW02	SW03	SW04	SW05	
	Depth:	0-3 ft	0-3 ft	0-3 ft	0-2 ft	0-2 ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	05.28.2020 09:15	05.28.2020 09:30	05.28.2020 09:45	05.28.2020 10:00	05.28.2020 10:15	
BTEX by EPA 8021B	Extracted:	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	06.01.2020 10:28	
	Analyzed:	06.01.2020 19:30	06.01.2020 16:26	06.01.2020 16:46	06.01.2020 18:28	06.01.2020 18:49	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	
Toluene		<0.00202 0.00202	0.0264 0.00201	<0.00202 0.00202	0.0187 0.00200	0.0339 0.00202	
Ethylbenzene		<0.00202 0.00202	0.0167 0.00201	<0.00202 0.00202	<0.00200 0.00200	0.0333 0.00202	
m,p-Xylenes		<0.00403 0.00403	0.0148 0.00402	<0.00403 0.00403	<0.00399 0.00399	0.0294 0.00403	
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	0.0112 0.00202	
Total Xylenes		<0.00202 0.00202	0.0148 0.00201	<0.00202 0.00202	<0.00200 0.00200	0.0406 0.00202	
Total BTEX		<0.00202 0.00202	0.0579 0.00201	<0.00202 0.00202	0.0187 0.00200	0.108 0.00202	
Chloride by EPA 300	Extracted:	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	06.01.2020 14:29	
	Analyzed:	06.01.2020 15:34	06.01.2020 15:41	06.01.2020 15:48	06.01.2020 15:55	06.01.2020 16:16	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		397 9.98	564 9.96	665 9.94	993 9.92	154 10.0	
TPH by SW8015 Mod	Extracted:	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	06.01.2020 12:00	
	Analyzed:	06.01.2020 15:29	06.01.2020 15:49	06.01.2020 14:27	06.01.2020 15:49	06.01.2020 15:29	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.2 50.2	
Diesel Range Organics (DRO)		<50.1 50.1	53.4 50.0	<50.1 50.1	1080 50.0	137 50.2	
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.0 50.0	<50.1 50.1	181 50.0	<50.2 50.2	
Total GRO-DRO		<50.1 50.1	53.4 50.0	<50.1 50.1	1080 50.0	137 50.2	
Total TPH		<50.1 50.1	53.4 50.0	<50.1 50.1	1260 50.0	137 50.2	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663035

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.02.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.02.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663035**

ADU Hondo

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 XENCO Report Number(s) 663035. 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 XENCO Laboratories. 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. 663035 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	05.28.2020 09:15	0 - 3 ft	663035-001
SW02	S	05.28.2020 09:30	0 - 3 ft	663035-002
SW03	S	05.28.2020 09:45	0 - 3 ft	663035-003
SW04	S	05.28.2020 10:00	0 - 2 ft	663035-004
SW05	S	05.28.2020 10:15	0 - 2 ft	663035-005



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663035

Report Date: 06.02.2020
Date Received: 06.01.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW01** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663035-001 Date Collected: 05.28.2020 09:15 Sample Depth: 0 - 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	397	9.98	mg/kg	06.01.2020 15:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 15:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.01.2020 15:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 15:29	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.01.2020 15:29	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.01.2020 15:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	06.01.2020 15:29	
o-Terphenyl	84-15-1	90	%	70-135	06.01.2020 15:29	



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW01**
Lab Sample Id: 663035-001

Matrix: Soil
Date Collected: 05.28.2020 09:15

Date Received: 06.01.2020 08:45
Sample Depth: 0 - 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.01.2020 19:30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.01.2020 19:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.01.2020 19:30		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.01.2020 19:30		



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW02** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663035-002 Date Collected: 05.28.2020 09:30 Sample Depth: 0 - 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	564	9.96	mg/kg	06.01.2020 15:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127603

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.01.2020 15:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	53.4	50.0	mg/kg	06.01.2020 15:49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.01.2020 15:49	U	1
Total GRO-DRO	PHC628	53.4	50.0	mg/kg	06.01.2020 15:49		1
Total TPH	PHC635	53.4	50.0	mg/kg	06.01.2020 15:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.01.2020 15:49	
o-Terphenyl	84-15-1	97	%	70-135	06.01.2020 15:49	



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW02**
Lab Sample Id: 663035-002

Matrix: Soil
Date Collected: 05.28.2020 09:30

Date Received: 06.01.2020 08:45
Sample Depth: 0 - 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.01.2020 16:26	U	1
Toluene	108-88-3	0.0264	0.00201	mg/kg	06.01.2020 16:26		1
Ethylbenzene	100-41-4	0.0167	0.00201	mg/kg	06.01.2020 16:26		1
m,p-Xylenes	179601-23-1	0.0148	0.00402	mg/kg	06.01.2020 16:26		1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.01.2020 16:26	U	1
Total Xylenes	1330-20-7	0.0148	0.00201	mg/kg	06.01.2020 16:26		1
Total BTEX		0.0579	0.00201	mg/kg	06.01.2020 16:26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.01.2020 16:26		
4-Bromofluorobenzene	460-00-4	91	%	70-130	06.01.2020 16:26		



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW03** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663035-003 Date Collected: 05.28.2020 09:45 Sample Depth: 0 - 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	665	9.94	mg/kg	06.01.2020 15:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.01.2020 14:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.01.2020 14:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.01.2020 14:27	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.01.2020 14:27	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.01.2020 14:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	06.01.2020 14:27	
o-Terphenyl	84-15-1	99	%	70-135	06.01.2020 14:27	



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW03**
Lab Sample Id: 663035-003

Matrix: Soil
Date Collected: 05.28.2020 09:45

Date Received: 06.01.2020 08:45
Sample Depth: 0 - 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.01.2020 16:46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.01.2020 16:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	06.01.2020 16:46		
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.01.2020 16:46		



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW04** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663035-004 Date Collected: 05.28.2020 10:00 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	993	9.92	mg/kg	06.01.2020 15:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.01.2020 15:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	1080	50.0	mg/kg	06.01.2020 15:49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	181	50.0	mg/kg	06.01.2020 15:49		1
Total GRO-DRO	PHC628	1080	50.0	mg/kg	06.01.2020 15:49		1
Total TPH	PHC635	1260	50.0	mg/kg	06.01.2020 15:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.01.2020 15:49	
o-Terphenyl	84-15-1	99	%	70-135	06.01.2020 15:49	



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW04**
Lab Sample Id: 663035-004

Matrix: Soil
Date Collected: 05.28.2020 10:00

Date Received: 06.01.2020 08:45
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.01.2020 18:28	U	1
Toluene	108-88-3	0.0187	0.00200	mg/kg	06.01.2020 18:28		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.01.2020 18:28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.01.2020 18:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.01.2020 18:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.01.2020 18:28	U	1
Total BTEX		0.0187	0.00200	mg/kg	06.01.2020 18:28		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.01.2020 18:28		
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.01.2020 18:28		



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW05** Matrix: Soil Date Received: 06.01.2020 08:45
 Lab Sample Id: 663035-005 Date Collected: 05.28.2020 10:15 Sample Depth: 0 - 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.01.2020 14:29 Basis: Wet Weight
 Seq Number: 3127636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	154	10.0	mg/kg	06.01.2020 16:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.01.2020 12:00 Basis: Wet Weight
 Seq Number: 3127596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.01.2020 15:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	137	50.2	mg/kg	06.01.2020 15:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.01.2020 15:29	U	1
Total GRO-DRO	PHC628	137	50.2	mg/kg	06.01.2020 15:29		1
Total TPH	PHC635	137	50.2	mg/kg	06.01.2020 15:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.01.2020 15:29	
o-Terphenyl	84-15-1	96	%	70-135	06.01.2020 15:29	



Certificate of Analytical Results 663035

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW05**
Lab Sample Id: 663035-005

Matrix: Soil
Date Collected: 05.28.2020 10:15

Date Received: 06.01.2020 08:45
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.01.2020 10:28

Basis: Wet Weight

Seq Number: 3127638

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.01.2020 18:49	U	1
Toluene	108-88-3	0.0339	0.00202	mg/kg	06.01.2020 18:49		1
Ethylbenzene	100-41-4	0.0333	0.00202	mg/kg	06.01.2020 18:49		1
m,p-Xylenes	179601-23-1	0.0294	0.00403	mg/kg	06.01.2020 18:49		1
o-Xylene	95-47-6	0.0112	0.00202	mg/kg	06.01.2020 18:49		1
Total Xylenes	1330-20-7	0.0406	0.00202	mg/kg	06.01.2020 18:49		1
Total BTEX		0.108	0.00202	mg/kg	06.01.2020 18:49		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.01.2020 18:49		
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.01.2020 18:49		



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.

ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

MB Sample Id: 7704530-1-BLK

Matrix: Solid

LCS Sample Id: 7704530-1-BKS

Prep Method: E300P

Date Prep: 06.01.2020

LCSD Sample Id: 7704530-1-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	250	100	250	100	90-110	0	20	mg/kg	06.01.2020 14:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

Parent Sample Id: 663033-001

Matrix: Soil

MS Sample Id: 663033-001 S

Prep Method: E300P

Date Prep: 06.01.2020

MSD Sample Id: 663033-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	200	527	92	527	92	90-110	0	20	mg/kg	06.01.2020 14:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3127636

Parent Sample Id: 663035-004

Matrix: Soil

MS Sample Id: 663035-004 S

Prep Method: E300P

Date Prep: 06.01.2020

MSD Sample Id: 663035-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	993	199	1180	94	1180	94	90-110	0	20	mg/kg	06.01.2020 16:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

MB Sample Id: 7704536-1-BLK

Matrix: Solid

LCS Sample Id: 7704536-1-BKS

Prep Method: SW8015P

Date Prep: 06.01.2020

LCSD Sample Id: 7704536-1-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	941	94	925	93	70-135	2	35	mg/kg	06.01.2020 12:44	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1010	101	70-135	1	35	mg/kg	06.01.2020 12:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		114		111		70-135	%	06.01.2020 12:44
o-Terphenyl	94		107		105		70-135	%	06.01.2020 12:44

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

MB Sample Id: 7704537-1-BLK

Matrix: Solid

LCS Sample Id: 7704537-1-BKS

Prep Method: SW8015P

Date Prep: 06.01.2020

LCSD Sample Id: 7704537-1-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	989	99	970	97	70-135	2	35	mg/kg	06.01.2020 12:44	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	992	99	70-135	4	35	mg/kg	06.01.2020 12:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		118		130		70-135	%	06.01.2020 12:44
o-Terphenyl	80		102		101		70-135	%	06.01.2020 12:44

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.01.2020

MB Sample Id: 7704536-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.01.2020 12:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.01.2020

MB Sample Id: 7704537-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.01.2020 12:23	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127596

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.01.2020

Parent Sample Id: 663033-001

MS Sample Id: 663033-001 S

MSD Sample Id: 663033-001 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)	<50.2	1000	981	98	998	100	70-135	2	35	mg/kg	06.01.2020 13:45	
Diesel Range Organics (DRO)	151	1000	1200	105	1010	86	70-135	17	35	mg/kg	06.01.2020 13:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		113		70-135	%	06.01.2020 13:45
o-Terphenyl	104		104		70-135	%	06.01.2020 13:45

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127603

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.01.2020

Parent Sample Id: 663033-007

MS Sample Id: 663033-007 S

MSD Sample Id: 663033-007 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	1110	111	1010	101	70-135	9	35	mg/kg	06.01.2020 13:45	
Diesel Range Organics (DRO)	<50.2	1000	1140	114	1050	105	70-135	8	35	mg/kg	06.01.2020 13:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		118		70-135	%	06.01.2020 13:45
o-Terphenyl	106		101		70-135	%	06.01.2020 13:45

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127638

MB Sample Id: 7704529-1-BLK

Matrix: Solid

LCS Sample Id: 7704529-1-BKS

Prep Method: SW5035A

Date Prep: 06.01.2020

LCSD Sample Id: 7704529-1-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	0.111	111	70-130	2	35	mg/kg	06.01.2020 12:01	
Toluene	<0.00200	0.100	0.105	105	0.106	106	70-130	1	35	mg/kg	06.01.2020 12:01	
Ethylbenzene	<0.00200	0.100	0.0988	99	0.100	100	71-129	1	35	mg/kg	06.01.2020 12:01	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.208	104	70-135	2	35	mg/kg	06.01.2020 12:01	
o-Xylene	<0.00200	0.100	0.102	102	0.105	105	71-133	3	35	mg/kg	06.01.2020 12:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		107		109		70-130	%	06.01.2020 12:01
4-Bromofluorobenzene	96		89		92		70-130	%	06.01.2020 12:01

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127638

Parent Sample Id: 663033-001

Matrix: Soil

MS Sample Id: 663033-001 S

Prep Method: SW5035A

Date Prep: 06.01.2020

MSD Sample Id: 663033-001 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	0.105	105	0.106	105	70-130	1	35	mg/kg	06.01.2020 17:07	
Toluene	0.119	0.100	0.202	83	0.202	82	70-130	0	35	mg/kg	06.01.2020 17:07	
Ethylbenzene	0.0352	0.100	0.125	90	0.116	80	71-129	7	35	mg/kg	06.01.2020 17:07	
m,p-Xylenes	0.105	0.200	0.297	96	0.290	92	70-135	2	35	mg/kg	06.01.2020 17:07	
o-Xylene	0.0348	0.100	0.129	94	0.130	94	71-133	1	35	mg/kg	06.01.2020 17:07	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	06.01.2020 17:07
4-Bromofluorobenzene	92		92		70-130	%	06.01.2020 17:07

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



Chain of Custody

Work Order No. 463035

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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Page 1 of 1

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:	slg@lternv.com, dmoir@lternv.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:	ADU Hondo	Turn Around	
Project Number:	012920017	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☐ No ☒
	Temperature (°C):	1.8	Thermometer ID	TN0007
	Received Intact:	Yes ☒ No ☐	Correction Factor:	-0.2
	Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:	5

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST													Sample Comments
					Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)										
SW01	S	5-28-20	9:15	0-3'	1	X	X	X										
SW02	S	5-28-20	9:30	0-3'	1	X	X	X										
SW03	S	5-28-20	9:45	0-3'	1	X	X	X										
SW04	S	5-28-20	10:00	0-2'	1	X	X	X										
SW05	S	5-28-20	10:15	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	1631 / 245.1 / 7470 / 7471 : Hg

Note: 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
Spencer Lo	W. Littrell	6/12/20 8:00am	W. Littrell	W. Littrell	6/1/20 08:45



Certificate of Analysis Summary 663129

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 08:15

Report Date: 06.03.2020 12:15

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	663129-001	663129-002	663129-003	663129-004		
	<i>Field Id:</i>	FS14	FS15	FS16	FS17		
	<i>Depth:</i>	4- ft	4- ft	4- ft	4- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	05.28.2020 14:00	05.28.2020 13:40	05.28.2020 13:20	05.28.2020 13:00		
BTEX by EPA 8021B	<i>Extracted:</i>	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48		
	<i>Analyzed:</i>	06.02.2020 13:48	06.02.2020 14:50	06.02.2020 15:10	06.02.2020 15:30		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
m,p-Xylenes		<0.00403 0.00403	<0.00402 0.00402	<0.00402 0.00402	<0.00403 0.00403		
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202		
Chloride by EPA 300	<i>Extracted:</i>	06.02.2020 14:43	06.02.2020 14:43	06.02.2020 14:43	06.02.2020 14:43		
	<i>Analyzed:</i>	*** ** *	*** ** *	*** ** *	*** ** *		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		1020 9.88	1240 10.1	961 10.1	777 10.1		
TPH by SW8015 Mod	<i>Extracted:</i>	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00		
	<i>Analyzed:</i>	06.02.2020 17:55	06.02.2020 13:26	06.02.2020 14:28	06.02.2020 14:48		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.3 50.3	<49.9 49.9	<49.8 49.8		
Diesel Range Organics (DRO)		<50.1 50.1	<50.3 50.3	<49.9 49.9	<49.8 49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.3 50.3	<49.9 49.9	<49.8 49.8		
Total GRO-DRO		<50.1 50.1	<50.3 50.3	<49.9 49.9	<49.8 49.8		
Total TPH		<50.1 50.1	<50.3 50.3	<49.9 49.9	<49.8 49.8		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663129

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663129**

ADU Hondo

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 XENCO Report Number(s) 663129. 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 XENCO Laboratories. 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. 663129 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS14	S	05.28.2020 14:00	4 ft	663129-001
FS15	S	05.28.2020 13:40	4 ft	663129-002
FS16	S	05.28.2020 13:20	4 ft	663129-003
FS17	S	05.28.2020 13:00	4 ft	663129-004



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663129

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS14** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663129-001 Date Collected: 05.28.2020 14:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 14:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1020	9.88	mg/kg	06.02.2020 11:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	06.02.2020 17:55	
o-Terphenyl	84-15-1	80	%	70-135	06.02.2020 17:55	



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS14**
Lab Sample Id: 663129-001

Matrix: Soil
Date Collected: 05.28.2020 14:00

Date Received: 06.02.2020 08:15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.02.2020 13:48	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 13:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.02.2020 13:48		
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.02.2020 13:48		



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS15** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663129-002 Date Collected: 05.28.2020 13:40 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 14:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1240	10.1	mg/kg	06.02.2020 11:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	06.02.2020 13:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	06.02.2020 13:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	06.02.2020 13:26	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	06.02.2020 13:26	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	06.02.2020 13:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.02.2020 13:26	
o-Terphenyl	84-15-1	105	%	70-135	06.02.2020 13:26	



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS15**
Lab Sample Id: 663129-002

Matrix: Soil
Date Collected: 05.28.2020 13:40

Date Received: 06.02.2020 08:15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.02.2020 14:50	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.02.2020 14:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.02.2020 14:50		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.02.2020 14:50		



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS16** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663129-003 Date Collected: 05.28.2020 13:20 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 14:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	961	10.1	mg/kg	06.02.2020 12:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.02.2020 14:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.02.2020 14:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.02.2020 14:28	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.02.2020 14:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.02.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.02.2020 14:28	
o-Terphenyl	84-15-1	104	%	70-135	06.02.2020 14:28	



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS16**
Lab Sample Id: 663129-003

Matrix: Soil
Date Collected: 05.28.2020 13:20

Date Received: 06.02.2020 08:15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.02.2020 15:10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.02.2020 15:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.02.2020 15:10	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.02.2020 15:10	



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS17** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663129-004 Date Collected: 05.28.2020 13:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 14:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	777	10.1	mg/kg	06.02.2020 12:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	06.02.2020 14:48	
o-Terphenyl	84-15-1	94	%	70-135	06.02.2020 14:48	



Certificate of Analytical Results 663129

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS17**
Lab Sample Id: 663129-004

Matrix: Soil
Date Collected: 05.28.2020 13:00

Date Received: 06.02.2020 08:15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.02.2020 15:30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 15:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.02.2020 15:30	
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.02.2020 15:30	



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.

ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

MB Sample Id: 7704600-1-BLK

Matrix: Solid

LCS Sample Id: 7704600-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704600-1-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	253	101	90-110	0	20	mg/kg	06.02.2020 11:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663128-001

Matrix: Soil

MS Sample Id: 663128-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663128-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	640	200	821	91	823	91	90-110	0	20	mg/kg	06.02.2020 11:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663130-005

Matrix: Soil

MS Sample Id: 663130-005 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663130-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2570	201	2780	104	2760	94	90-110	1	20	mg/kg	06.02.2020 12:56	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

MB Sample Id: 7704608-1-BLK

Matrix: Solid

LCS Sample Id: 7704608-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704608-1-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	928	93	918	92	70-135	1	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		112		111		70-135	%	06.02.2020 10:39
o-Terphenyl	96		107		107		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

MB Sample Id: 7704607-1-BLK

Matrix: Solid

LCS Sample Id: 7704607-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704607-1-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	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1040	104	70-135	1	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		120		120		70-135	%	06.02.2020 10:39
o-Terphenyl	98		105		103		70-135	%	06.02.2020 10:39

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.02.2020

MB Sample Id: 7704608-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

06.02.2020 10:18

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.02.2020

MB Sample Id: 7704607-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

06.02.2020 10:18

Flag

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.02.2020

Parent Sample Id: 663129-002

MS Sample Id: 663129-002 S

MSD Sample Id: 663129-002 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<50.0

**Spike
Amount**

999

**MS
Result**

991

**MS
%Rec**

99

**MSD
Result**

1010

**MSD
%Rec**

102

Limits

70-135

%RPD

2

**RPD
Limit**

35

Units

mg/kg

**Analysis
Date**

06.02.2020 13:46

Flag

Diesel Range Organics (DRO)

<50.0

999

1100

110

1100

111

70-135

0

35

mg/kg

06.02.2020 13:46

Surrogate

1-Chlorooctane

**MS
%Rec**

115

**MS
Flag**

**MSD
%Rec**

118

**MSD
Flag**

Limits

70-135

Units

%

**Analysis
Date**

06.02.2020 13:46

o-Terphenyl

111

111

70-135

%

06.02.2020 13:46

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.02.2020

Parent Sample Id: 663131-001

MS Sample Id: 663131-001 S

MSD Sample Id: 663131-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<50.1

**Spike
Amount**

1000

**MS
Result**

1040

**MS
%Rec**

104

**MSD
Result**

979

**MSD
%Rec**

98

Limits

70-135

%RPD

6

**RPD
Limit**

35

Units

mg/kg

**Analysis
Date**

06.02.2020 13:46

Flag

Diesel Range Organics (DRO)

250

1000

1260

101

1200

95

70-135

5

35

mg/kg

06.02.2020 13:46

Surrogate

1-Chlorooctane

**MS
%Rec**

119

**MS
Flag**

**MSD
%Rec**

108

**MSD
Flag**

Limits

70-135

Units

%

**Analysis
Date**

06.02.2020 13:46

o-Terphenyl

93

84

70-135

%

06.02.2020 13:46

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

MB Sample Id: 7704602-1-BLK

Matrix: Solid

LCS Sample Id: 7704602-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704602-1-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	0.111	111	0.116	116	70-130	4	35	mg/kg	06.02.2020 12:06	
Toluene	<0.00200	0.100	0.105	105	0.111	111	70-130	6	35	mg/kg	06.02.2020 12:06	
Ethylbenzene	<0.00200	0.100	0.0991	99	0.104	104	71-129	5	35	mg/kg	06.02.2020 12:06	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.213	107	70-135	4	35	mg/kg	06.02.2020 12:06	
o-Xylene	<0.00200	0.100	0.103	103	0.108	108	71-133	5	35	mg/kg	06.02.2020 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		108		70-130	%	06.02.2020 12:06
4-Bromofluorobenzene	97		96		93		70-130	%	06.02.2020 12:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

Parent Sample Id: 663129-001

Matrix: Soil

MS Sample Id: 663129-001 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663129-001 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	0.105	105	0.110	110	70-130	5	35	mg/kg	06.02.2020 12:47	
Toluene	<0.00200	0.100	0.0998	100	0.105	105	70-130	5	35	mg/kg	06.02.2020 12:47	
Ethylbenzene	<0.00200	0.100	0.0910	91	0.100	100	71-129	9	35	mg/kg	06.02.2020 12:47	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.205	103	70-135	9	35	mg/kg	06.02.2020 12:47	
o-Xylene	<0.00200	0.100	0.0937	94	0.104	104	71-133	10	35	mg/kg	06.02.2020 12:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	06.02.2020 12:47
4-Bromofluorobenzene	93		92		70-130	%	06.02.2020 12:47

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: 1663129

Project Manager: Dan Moir

Company Name: LT Environmental, Inc., Permian office

Address: 3300 North A Street

City, State ZIP: Midland, TX 79705

Phone: (432) 236-3849

Bill to: (if different) Kyle Littrell

Company Name: XTO Energy

Address: 3104 East Green Street

City, State ZIP: Carlsbad, NM 88220

Email: slo@ltenv.com, dmoir@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:

ANALYSIS REQUEST

Work Order Notes

Project Name: Adv Honda Turn Around
Project Number: 012920017 Routine ☒
P.O. Number: Rush:
Sampler's Name: Spencer Lo Due Date:

SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
Temperature (°C): 1.0 Thermometer ID
Received Intact: Yes No Correction Factor: -0.2
Cooler Custody Seals: Yes No N/A Total Containers: 4
Sample Custody Seals: Yes No N/A

Sample Identification Matrix Date Sampled Time Sampled Depth
FS14 5 5-28-20 1400 4'
FS15 1 1340
FS16 1 1320
FS17 1 1300

Number of Containers
TPH (EPA 8015)
BTEX (EPA 0-8021)
Chloride (EPA 300.0)

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

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 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

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

Signature

Signature

Date/Time

Signature

Signature

Date/Time

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 08.15.00 AM

Work Order #: 663129

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.02.2020



Certificate of Analysis Summary 663128

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 08:15

Report Date: 06.03.2020 11:51

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663128-001	663128-002				
	Field Id:	PH07	PH07A				
	Depth:	2- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	06.01.2020 09:00	06.01.2020 09:10				
BTEX by EPA 8021B	Extracted:	06.02.2020 10:48	06.02.2020 10:48				
	Analyzed:	06.02.2020 14:09	06.02.2020 14:29				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00202 0.00202	<0.00202 0.00202				
	Toluene	<0.00202 0.00202	<0.00202 0.00202				
	Ethylbenzene	<0.00202 0.00202	<0.00202 0.00202				
	m,p-Xylenes	<0.00403 0.00403	<0.00404 0.00404				
	o-Xylene	<0.00202 0.00202	<0.00202 0.00202				
	Total Xylenes	<0.00202 0.00202	<0.00202 0.00202				
	Total BTEX	<0.00202 0.00202	<0.00202 0.00202				
Chloride by EPA 300	Extracted:	06.02.2020 10:43	06.02.2020 10:43				
	Analyzed:	06.02.2020 11:29	06.02.2020 11:47				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	640 10.0	333 10.1				
TPH by SW8015 Mod	Extracted:	06.02.2020 11:00	06.02.2020 11:00				
	Analyzed:	06.02.2020 17:14	06.02.2020 17:55				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.1 50.1	<50.1 50.1				
	Diesel Range Organics (DRO)	63.6 50.1	<50.1 50.1				
	Motor Oil Range Hydrocarbons (MRO)	<50.1 50.1	<50.1 50.1				
	Total GRO-DRO	63.6 50.1	<50.1 50.1				
	Total TPH	63.6 50.1	<50.1 50.1				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663128

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663128**

ADU Hondo

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 XENCO Report Number(s) 663128. 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 XENCO Laboratories. 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. 663128 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663128

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH07	S	06.01.2020 09:00	2 ft	663128-001
PH07A	S	06.01.2020 09:10	4 ft	663128-002



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663128

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663128

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH07** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663128-001 Date Collected: 06.01.2020 09:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	640	10.0	mg/kg	06.02.2020 11:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 17:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	63.6	50.1	mg/kg	06.02.2020 17:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 17:14	U	1
Total GRO-DRO	PHC628	63.6	50.1	mg/kg	06.02.2020 17:14		1
Total TPH	PHC635	63.6	50.1	mg/kg	06.02.2020 17:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	06.02.2020 17:14	
o-Terphenyl	84-15-1	98	%	70-135	06.02.2020 17:14	



Certificate of Analytical Results 663128

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH07**
Lab Sample Id: 663128-001

Matrix: Soil
Date Collected: 06.01.2020 09:00

Date Received: 06.02.2020 08:15
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.02.2020 14:09	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 14:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.02.2020 14:09		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.02.2020 14:09		



Certificate of Analytical Results 663128

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH07A** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663128-002 Date Collected: 06.01.2020 09:10 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	333	10.1	mg/kg	06.02.2020 11:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.02.2020 17:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	06.02.2020 17:55	
o-Terphenyl	84-15-1	97	%	70-135	06.02.2020 17:55	



Certificate of Analytical Results 663128

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH07A**
Lab Sample Id: 663128-002

Matrix: Soil
Date Collected: 06.01.2020 09:10

Date Received: 06.02.2020 08:15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127759

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.02.2020 14:29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 14:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.02.2020 14:29		
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.02.2020 14:29		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

MB Sample Id: 7704600-1-BLK

Matrix: Solid

LCS Sample Id: 7704600-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704600-1-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	253	101	90-110	0	20	mg/kg	06.02.2020 11:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663128-001

Matrix: Soil

MS Sample Id: 663128-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663128-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	640	200	821	91	823	91	90-110	0	20	mg/kg	06.02.2020 11:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663130-005

Matrix: Soil

MS Sample Id: 663130-005 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663130-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2570	201	2780	104	2760	94	90-110	1	20	mg/kg	06.02.2020 12:56	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

MB Sample Id: 7704608-1-BLK

Matrix: Solid

LCS Sample Id: 7704608-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704608-1-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	928	93	918	92	70-135	1	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		112		111		70-135	%	06.02.2020 10:39
o-Terphenyl	96		107		107		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Matrix: Solid

MB Sample Id: 7704608-1-BLK

Prep Method: SW8015P

Date Prep: 06.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Parent Sample Id: 663129-002

Matrix: Soil

MS Sample Id: 663129-002 S

Prep Method: SW8015P

Date Prep: 06.02.2020

MSD Sample Id: 663129-002 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)	<50.0	999	991	99	1010	102	70-135	2	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	<50.0	999	1100	110	1100	111	70-135	0	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		118		70-135	%	06.02.2020 13:46
o-Terphenyl	111		111		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

MB Sample Id: 7704602-1-BLK

Matrix: Solid

LCS Sample Id: 7704602-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704602-1-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	0.111	111	0.116	116	70-130	4	35	mg/kg	06.02.2020 12:06	
Toluene	<0.00200	0.100	0.105	105	0.111	111	70-130	6	35	mg/kg	06.02.2020 12:06	
Ethylbenzene	<0.00200	0.100	0.0991	99	0.104	104	71-129	5	35	mg/kg	06.02.2020 12:06	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.213	107	70-135	4	35	mg/kg	06.02.2020 12:06	
o-Xylene	<0.00200	0.100	0.103	103	0.108	108	71-133	5	35	mg/kg	06.02.2020 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		108		70-130	%	06.02.2020 12:06
4-Bromofluorobenzene	97		96		93		70-130	%	06.02.2020 12:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

Parent Sample Id: 663129-001

Matrix: Soil

MS Sample Id: 663129-001 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663129-001 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	0.105	105	0.110	110	70-130	5	35	mg/kg	06.02.2020 12:47	
Toluene	<0.00200	0.100	0.0998	100	0.105	105	70-130	5	35	mg/kg	06.02.2020 12:47	
Ethylbenzene	<0.00200	0.100	0.0910	91	0.100	100	71-129	9	35	mg/kg	06.02.2020 12:47	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.205	103	70-135	9	35	mg/kg	06.02.2020 12:47	
o-Xylene	<0.00200	0.100	0.0937	94	0.104	104	71-133	10	35	mg/kg	06.02.2020 12:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	06.02.2020 12:47
4-Bromofluorobenzene	93		92		70-130	%	06.02.2020 12:47

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 (480-355-0909) Atlanta GA (770) 448-8909
Hobbs NM (575-392-7550)

Chain of Custody

Work Order No: 6103128

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@lternv.com, dmoir@lternv.com

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

Project Name:	4DV Honda	Turn Around
Project Number:	012920017	Routine ☒
P.O. Number:		Rush:
Sampler's Name:	Spencer Lo	Due Date:

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.0		☒	☐		☒	☐
Received Infract:	Yes No		☒	☐	Thermometer ID	4NM007	
Cooler Custody Seals:	Yes No N/A		☒	☐	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A		☒	☐	Total Containers:	2	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
411-3				

	>	6.1.20	900	2'	1	X	X	X	X
PHOJA	S	6.1.20	910	41	1	X	X	X	X

Spc
to

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 Ho

203
b. Xencro 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 Xencro. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencro, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	6/21/2017 3:30pm		6/21/20 08:15

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 08.15.00 AM

Work Order #: 663128

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)?	1
#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: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.02.2020



Certificate of Analysis Summary 663131

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 08:15

Report Date: 06.03.2020 12:09

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	663131-001	663131-002	663131-003	663131-004	663131-005	663131-006
	<i>Field Id:</i>	SW06	SW07	SW08	SW09	SW10	SW11
	<i>Depth:</i>	0-4 ft	0-4 ft	0-4 ft	0-4 ft	0-4 ft	0-4 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	06.01.2020 10:05	06.01.2020 10:00	06.01.2020 09:55	05.28.2020 14:20	05.28.2020 14:40	05.28.2020 15:00
BTEX by EPA 8021B	<i>Extracted:</i>	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 10:48
	<i>Analyzed:</i>	06.02.2020 18:54	06.02.2020 19:15	06.02.2020 19:35	06.02.2020 19:55	06.02.2020 20:16	06.02.2020 20:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.0242 0.00201	0.0326 0.00201	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
m,p-Xylenes		<0.00404 0.00404	<0.00400 0.00400	<0.00400 0.00400	<0.00402 0.00402	0.0119 0.00402	<0.00403 0.00403
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	0.0119 0.00201	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.0242 0.00201	0.0445 0.00201	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	06.02.2020 10:43	06.02.2020 10:43	06.02.2020 10:43	06.02.2020 10:43	06.02.2020 10:43	06.02.2020 10:43
	<i>Analyzed:</i>	06.02.2020 13:14	06.02.2020 13:21	06.02.2020 13:40	06.02.2020 13:47	06.02.2020 13:53	06.02.2020 14:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		62.3 10.1	110 10.1	283 10.1	275 10.0	72.7 10.0	46.0 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00
	<i>Analyzed:</i>	06.02.2020 13:26	06.02.2020 14:28	06.02.2020 14:48	06.02.2020 15:09	06.02.2020 15:30	06.02.2020 15:50
	<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	<50.2 50.2	<49.8 49.8	<49.8 49.8	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		250 50.2	<50.2 50.2	69.6 49.8	571 49.8	570 49.9	545 49.8
Motor Oil Range Hydrocarbons (MRO)		81.4 50.2	<50.2 50.2	<49.8 49.8	74.3 49.8	71.8 49.9	65.4 49.8
Total GRO-DRO		250 50.2	<50.2 50.2	69.6 49.8	571 49.8	570 49.9	545 49.8
Total TPH		331 50.2	<50.2 50.2	69.6 49.8	645 49.8	642 49.9	610 49.8

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 663131

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 08:15

Report Date: 06.03.2020 12:09

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663131-007	663131-008	663131-009	663131-010		
	Field Id:	SW12	SW13	SW14	SW15		
	Depth:	0-4 ft	0-4 ft	0-4 ft	0-4 ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	06.01.2020 15:10	06.01.2020 15:20	06.01.2020 15:30	06.01.2020 09:25		
BTEX by EPA 8021B	Extracted:	06.02.2020 10:48	06.02.2020 10:48	06.02.2020 14:51	06.02.2020 14:51		
	Analyzed:	06.02.2020 20:57	06.02.2020 21:17	06.03.2020 00:21	06.03.2020 00:41		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
Toluene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
Ethylbenzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
m,p-Xylenes		<0.00396 0.00396	<0.00402 0.00402	<0.00401 0.00401	<0.00401 0.00401		
o-Xylene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
Total Xylenes		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
Total BTEX		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200		
Chloride by EPA 300	Extracted:	06.02.2020 10:43	06.02.2020 10:43	06.02.2020 13:46	06.02.2020 13:46		
	Analyzed:	06.02.2020 14:06	06.02.2020 15:11	06.02.2020 15:31	06.02.2020 15:50		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		324 10.0	291 10.0	120 9.92	13.1 10.1		
TPH by SW8015 Mod	Extracted:	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00	06.02.2020 11:00		
	Analyzed:	06.02.2020 16:11	06.03.2020 09:51	06.03.2020 10:11	06.03.2020 10:32		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.2 50.2	<50.0 50.0		
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.2 50.2	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.2 50.2	<50.0 50.0		
Total GRO-DRO		<49.9 49.9	<49.9 49.9	<50.2 50.2	<50.0 50.0		
Total TPH		<49.9 49.9	<49.9 49.9	<50.2 50.2	<50.0 50.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663131

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663131**

ADU Hondo

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 XENCO Report Number(s) 663131. 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 XENCO Laboratories. 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. 663131 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 XENCO Laboratories 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 663131****LT Environmental, Inc., Arvada, CO**

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW06	S	06.01.2020 10:05	0 - 4 ft	663131-001
SW07	S	06.01.2020 10:00	0 - 4 ft	663131-002
SW08	S	06.01.2020 09:55	0 - 4 ft	663131-003
SW09	S	05.28.2020 14:20	0 - 4 ft	663131-004
SW10	S	05.28.2020 14:40	0 - 4 ft	663131-005
SW11	S	05.28.2020 15:00	0 - 4 ft	663131-006
SW12	S	06.01.2020 15:10	0 - 4 ft	663131-007
SW13	S	06.01.2020 15:20	0 - 4 ft	663131-008
SW14	S	06.01.2020 15:30	0 - 4 ft	663131-009
SW15	S	06.01.2020 09:25	0 - 4 ft	663131-010



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663131

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW06** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-001 Date Collected: 06.01.2020 10:05 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.3	10.1	mg/kg	06.02.2020 13:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.02.2020 13:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	250	50.2	mg/kg	06.02.2020 13:26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	81.4	50.2	mg/kg	06.02.2020 13:26		1
Total GRO-DRO	PHC628	250	50.2	mg/kg	06.02.2020 13:26		1
Total TPH	PHC635	331	50.2	mg/kg	06.02.2020 13:26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.02.2020 13:26	
o-Terphenyl	84-15-1	92	%	70-135	06.02.2020 13:26	



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW06**
Lab Sample Id: 663131-001

Matrix: Soil
Date Collected: 06.01.2020 10:05

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127759

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.02.2020 18:54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 18:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.02.2020 18:54		
4-Bromofluorobenzene	460-00-4	90	%	70-130	06.02.2020 18:54		



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW07** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-002 Date Collected: 06.01.2020 10:00 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	110	10.1	mg/kg	06.02.2020 13:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.02.2020 14:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.02.2020 14:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.02.2020 14:28	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.02.2020 14:28	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.02.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.02.2020 14:28	
o-Terphenyl	84-15-1	90	%	70-135	06.02.2020 14:28	



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW07**
Lab Sample Id: 663131-002

Matrix: Soil
Date Collected: 06.01.2020 10:00

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.02.2020 19:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.02.2020 19:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.02.2020 19:15		
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.02.2020 19:15		



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW08** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-003 Date Collected: 06.01.2020 09:55 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	283	10.1	mg/kg	06.02.2020 13:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	69.6	49.8	mg/kg	06.02.2020 14:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.02.2020 14:48	U	1
Total GRO-DRO	PHC628	69.6	49.8	mg/kg	06.02.2020 14:48		1
Total TPH	PHC635	69.6	49.8	mg/kg	06.02.2020 14:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	06.02.2020 14:48	
o-Terphenyl	84-15-1	76	%	70-135	06.02.2020 14:48	



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW08**
Lab Sample Id: 663131-003

Matrix: Soil
Date Collected: 06.01.2020 09:55

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.02.2020 19:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.02.2020 19:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	06.02.2020 19:35	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.02.2020 19:35	



Certificate of Analytical Results 663131

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW09** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-004 Date Collected: 05.28.2020 14:20 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	275	10.0	mg/kg	06.02.2020 13:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.02.2020 15:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	571	49.8	mg/kg	06.02.2020 15:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	74.3	49.8	mg/kg	06.02.2020 15:09		1
Total GRO-DRO	PHC628	571	49.8	mg/kg	06.02.2020 15:09		1
Total TPH	PHC635	645	49.8	mg/kg	06.02.2020 15:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	06.02.2020 15:09	
o-Terphenyl	84-15-1	79	%	70-135	06.02.2020 15:09	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW09**
Lab Sample Id: 663131-004

Matrix: Soil
Date Collected: 05.28.2020 14:20

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127759

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 19:55	U	1
Toluene	108-88-3	0.0242	0.00201	mg/kg	06.02.2020 19:55		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 19:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.02.2020 19:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 19:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.02.2020 19:55	U	1
Total BTEX		0.0242	0.00201	mg/kg	06.02.2020 19:55		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	06.02.2020 19:55		
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.02.2020 19:55		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW10** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-005 Date Collected: 05.28.2020 14:40 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.7	10.0	mg/kg	06.02.2020 13:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.02.2020 15:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	570	49.9	mg/kg	06.02.2020 15:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	71.8	49.9	mg/kg	06.02.2020 15:30		1
Total GRO-DRO	PHC628	570	49.9	mg/kg	06.02.2020 15:30		1
Total TPH	PHC635	642	49.9	mg/kg	06.02.2020 15:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	06.02.2020 15:30	
o-Terphenyl	84-15-1	94	%	70-135	06.02.2020 15:30	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW10**
Lab Sample Id: 663131-005

Matrix: Soil
Date Collected: 05.28.2020 14:40

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 20:16	U	1
Toluene	108-88-3	0.0326	0.00201	mg/kg	06.02.2020 20:16		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 20:16	U	1
m,p-Xylenes	179601-23-1	0.0119	0.00402	mg/kg	06.02.2020 20:16		1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 20:16	U	1
Total Xylenes	1330-20-7	0.0119	0.00201	mg/kg	06.02.2020 20:16		1
Total BTEX		0.0445	0.00201	mg/kg	06.02.2020 20:16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.02.2020 20:16	
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.02.2020 20:16	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW11** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-006 Date Collected: 05.28.2020 15:00 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.0	10.0	mg/kg	06.02.2020 14:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.02.2020 15:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	545	49.8	mg/kg	06.02.2020 15:50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	65.4	49.8	mg/kg	06.02.2020 15:50		1
Total GRO-DRO	PHC628	545	49.8	mg/kg	06.02.2020 15:50		1
Total TPH	PHC635	610	49.8	mg/kg	06.02.2020 15:50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	06.02.2020 15:50	
o-Terphenyl	84-15-1	93	%	70-135	06.02.2020 15:50	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW11**
Lab Sample Id: 663131-006

Matrix: Soil
Date Collected: 05.28.2020 15:00

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.02.2020 20:36	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.02.2020 20:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	06.02.2020 20:36		
1,4-Difluorobenzene	540-36-3	108	%	70-130	06.02.2020 20:36		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW12** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-007 Date Collected: 06.01.2020 15:10 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	324	10.0	mg/kg	06.02.2020 14:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.02.2020 16:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.02.2020 16:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.02.2020 16:11	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.02.2020 16:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.02.2020 16:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	06.02.2020 16:11	
o-Terphenyl	84-15-1	76	%	70-135	06.02.2020 16:11	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW12**
Lab Sample Id: 663131-007

Matrix: Soil
Date Collected: 06.01.2020 15:10

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	06.02.2020 20:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.02.2020 20:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	06.02.2020 20:57	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.02.2020 20:57	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW13** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-008 Date Collected: 06.01.2020 15:20 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 10:43 Basis: Wet Weight
 Seq Number: 3127754

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	291	10.0	mg/kg	06.02.2020 15:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.03.2020 09:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.03.2020 09:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.03.2020 09:51	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	06.03.2020 09:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.03.2020 09:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.03.2020 09:51	
o-Terphenyl	84-15-1	98	%	70-135	06.03.2020 09:51	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW13**
Lab Sample Id: 663131-008

Matrix: Soil
Date Collected: 06.01.2020 15:20

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 10:48

Basis: Wet Weight

Seq Number: 3127759

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.02.2020 21:17	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.02.2020 21:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.02.2020 21:17		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.02.2020 21:17		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW14** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-009 Date Collected: 06.01.2020 15:30 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 13:46 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	120	9.92	mg/kg	06.02.2020 15:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.03.2020 10:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.03.2020 10:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.03.2020 10:11	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.03.2020 10:11	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.03.2020 10:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.03.2020 10:11	
o-Terphenyl	84-15-1	97	%	70-135	06.03.2020 10:11	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW14**
Lab Sample Id: 663131-009

Matrix: Soil
Date Collected: 06.01.2020 15:30

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 14:51

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.03.2020 00:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.03.2020 00:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.03.2020 00:21		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 00:21		



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW15** Matrix: Soil Date Received: 06.02.2020 08:15
 Lab Sample Id: 663131-010 Date Collected: 06.01.2020 09:25 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 13:46 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.1	10.1	mg/kg	06.02.2020 15:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 11:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.03.2020 10:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.03.2020 10:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.03.2020 10:32	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.03.2020 10:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.03.2020 10:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.03.2020 10:32	
o-Terphenyl	84-15-1	89	%	70-135	06.03.2020 10:32	



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LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW15**
Lab Sample Id: 663131-010

Matrix: Soil
Date Collected: 06.01.2020 09:25

Date Received: 06.02.2020 08:15
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 14:51

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.03.2020 00:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.03.2020 00:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 00:41		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 00:41		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

MB Sample Id: 7704600-1-BLK

Matrix: Solid

LCS Sample Id: 7704600-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704600-1-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	253	101	90-110	0	20	mg/kg	06.02.2020 11:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

MB Sample Id: 7704601-1-BLK

Matrix: Solid

LCS Sample Id: 7704601-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704601-1-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	252	101	253	101	90-110	0	20	mg/kg	06.02.2020 14:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663128-001

Matrix: Soil

MS Sample Id: 663128-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663128-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	640	200	821	91	823	91	90-110	0	20	mg/kg	06.02.2020 11:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3127754

Parent Sample Id: 663130-005

Matrix: Soil

MS Sample Id: 663130-005 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663130-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2570	201	2780	104	2760	94	90-110	1	20	mg/kg	06.02.2020 12:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	202	301	90	301	90	90-110	0	20	mg/kg	06.02.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663245-001

Matrix: Soil

MS Sample Id: 663245-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663245-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	682	200	871	95	870	94	90-110	0	20	mg/kg	06.02.2020 17:44	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

MB Sample Id: 7704607-1-BLK

Matrix: Solid

LCS Sample Id: 7704607-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704607-1-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	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1040	104	70-135	1	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		120		120		70-135	%	06.02.2020 10:39
o-Terphenyl	98		105		103		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Solid

Prep Method: SW8015P

Date Prep: 06.02.2020

MB Sample Id: 7704607-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Soil

Prep Method: SW8015P

Date Prep: 06.02.2020

Parent Sample Id: 663131-001

MS Sample Id: 663131-001 S

MSD Sample Id: 663131-001 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)	<50.1	1000	1040	104	979	98	70-135	6	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	250	1000	1260	101	1200	95	70-135	5	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		108		70-135	%	06.02.2020 13:46
o-Terphenyl	93		84		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

Matrix: Solid

Prep Method: SW5035A

Date Prep: 06.02.2020

MB Sample Id: 7704602-1-BLK

LCS Sample Id: 7704602-1-BKS

LCSD Sample Id: 7704602-1-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	0.111	111	0.116	116	70-130	4	35	mg/kg	06.02.2020 12:06	
Toluene	<0.00200	0.100	0.105	105	0.111	111	70-130	6	35	mg/kg	06.02.2020 12:06	
Ethylbenzene	<0.00200	0.100	0.0991	99	0.104	104	71-129	5	35	mg/kg	06.02.2020 12:06	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.213	107	70-135	4	35	mg/kg	06.02.2020 12:06	
o-Xylene	<0.00200	0.100	0.103	103	0.108	108	71-133	5	35	mg/kg	06.02.2020 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		107		108		70-130	%	06.02.2020 12:06
4-Bromofluorobenzene	97		96		93		70-130	%	06.02.2020 12:06

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Matrix: Solid

Prep Method: SW5035A

Date Prep: 06.02.2020

MB Sample Id: 7704604-1-BLK

LCS Sample Id: 7704604-1-BKS

LCSD Sample Id: 7704604-1-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	0.108	108	0.104	104	70-130	4	35	mg/kg	06.02.2020 22:39	
Toluene	<0.00200	0.100	0.102	102	0.0989	99	70-130	3	35	mg/kg	06.02.2020 22:39	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0926	93	71-129	4	35	mg/kg	06.02.2020 22:39	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.190	95	70-135	3	35	mg/kg	06.02.2020 22:39	
o-Xylene	<0.00200	0.100	0.0998	100	0.0972	97	71-133	3	35	mg/kg	06.02.2020 22:39	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	112		107		109		70-130			%	06.02.2020 22:39	
4-Bromofluorobenzene	97		91		92		70-130			%	06.02.2020 22:39	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127759

Matrix: Soil

Prep Method: SW5035A

Date Prep: 06.02.2020

Parent Sample Id: 663129-001

MS Sample Id: 663129-001 S

MSD Sample Id: 663129-001 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	0.105	105	0.110	110	70-130	5	35	mg/kg	06.02.2020 12:47	
Toluene	<0.00200	0.100	0.0998	100	0.105	105	70-130	5	35	mg/kg	06.02.2020 12:47	
Ethylbenzene	<0.00200	0.100	0.0910	91	0.100	100	71-129	9	35	mg/kg	06.02.2020 12:47	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.205	103	70-135	9	35	mg/kg	06.02.2020 12:47	
o-Xylene	<0.00200	0.100	0.0937	94	0.104	104	71-133	10	35	mg/kg	06.02.2020 12:47	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			107		107		70-130			%	06.02.2020 12:47	
4-Bromofluorobenzene			93		92		70-130			%	06.02.2020 12:47	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Matrix: Soil

Prep Method: SW5035A

Date Prep: 06.02.2020

Parent Sample Id: 663131-009

MS Sample Id: 663131-009 S

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0943	95	0.106	106	70-130	12	35	mg/kg	06.02.2020 23:19	
Toluene	<0.00199	0.0996	0.0845	85	0.101	101	70-130	18	35	mg/kg	06.02.2020 23:19	
Ethylbenzene	<0.00199	0.0996	0.0726	73	0.0944	94	71-129	26	35	mg/kg	06.02.2020 23:19	
m,p-Xylenes	<0.00398	0.199	0.147	74	0.192	96	70-135	27	35	mg/kg	06.02.2020 23:19	
o-Xylene	<0.00199	0.0996	0.0742	74	0.0983	98	71-133	28	35	mg/kg	06.02.2020 23:19	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			108		107		70-130			%	06.02.2020 23:19	
4-Bromofluorobenzene			92		93		70-130			%	06.02.2020 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

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

Work Order No: 663131

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

Project Name:	ADU Honda	Turn Around	
Project Number:	012920017	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.0					
Received In tact:	Yes	No	Thermometer ID:	TMM007		
Cooler Custody Seals:	Yes	No	Correction Factor:	-0.2		
Sample Custody Seals:	Yes	No	Total Containers:	10		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			ANALYSIS REQUEST										Work Order Notes
					TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)											
Sw06	S	6-1-20	1005	6-4'	X	X	X											
Sw07		6-1-20	1000															
Sw08		6-1-20	955															
Sw09		5-28-20	1420															
Sw10		5-28-20	1440															
Sw11		5-28-20	1500															
Sw12		6-1-20	1510															
Sw13		6-1-20	1520															
Sw14		6-1-20	1530															
Sw15		6-1-20	925															

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 to Xenco. 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
		6/2/20 7:30am			6/2/20 08:15

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 08.15.00 AM

Work Order #: 663131

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)?	1
#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: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.03.2020



Certificate of Analysis Summary 663251

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 15:45

Report Date: 06.03.2020 12:14

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663251-001	663251-002				
	Field Id:	PH09	PH09A				
	Depth:	2- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	06.01.2020 10:10	06.01.2020 10:20				
BTEX by EPA 8021B	Extracted:	06.02.2020 16:00	06.02.2020 16:00				
	Analyzed:	06.03.2020 03:24	06.03.2020 04:26				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00199 0.00199	<0.00202 0.00202				
	Toluene	<0.00199 0.00199	<0.00202 0.00202				
	Ethylbenzene	<0.00199 0.00199	<0.00202 0.00202				
	m,p-Xylenes	<0.00398 0.00398	<0.00403 0.00403				
	o-Xylene	<0.00199 0.00199	<0.00202 0.00202				
	Total Xylenes	<0.00199 0.00199	<0.00202 0.00202				
	Total BTEX	<0.00199 0.00199	<0.00202 0.00202				
Chloride by EPA 300	Extracted:	06.02.2020 16:30	06.02.2020 16:30				
	Analyzed:	06.02.2020 17:20	06.02.2020 17:28				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	248 10.0	350 10.1				
TPH by SW8015 Mod	Extracted:	06.02.2020 17:00	06.02.2020 17:00				
	Analyzed:	06.02.2020 19:59	06.02.2020 20:20				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<50.1 50.1				
	Diesel Range Organics (DRO)	<50.0 50.0	<50.1 50.1				
	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<50.1 50.1				
	Total GRO-DRO	<50.0 50.0	<50.1 50.1				
	Total TPH	<50.0 50.0	<50.1 50.1				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663251

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663251**

ADU Hondo

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 XENCO Report Number(s) 663251. 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 XENCO Laboratories. 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. 663251 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663251

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH09	S	06.01.2020 10:10	2 ft	663251-001
PH09A	S	06.01.2020 10:20	4 ft	663251-002



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663251

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663251

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH09** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663251-001 Date Collected: 06.01.2020 10:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	248	10.0	mg/kg	06.02.2020 17:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.02.2020 19:59	
o-Terphenyl	84-15-1	95	%	70-135	06.02.2020 19:59	



Certificate of Analytical Results 663251

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH09**
Lab Sample Id: 663251-001

Matrix: Soil
Date Collected: 06.01.2020 10:10

Date Received: 06.02.2020 15:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.03.2020 03:24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.03.2020 03:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	06.03.2020 03:24		
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.03.2020 03:24		



Certificate of Analytical Results 663251

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH09A** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663251-002 Date Collected: 06.01.2020 10:20 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	350	10.1	mg/kg	06.02.2020 17:28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 20:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.02.2020 20:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 20:20	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.02.2020 20:20	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.02.2020 20:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	06.02.2020 20:20	
o-Terphenyl	84-15-1	96	%	70-135	06.02.2020 20:20	



Certificate of Analytical Results 663251

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH09A**
Lab Sample Id: 663251-002

Matrix: Soil
Date Collected: 06.01.2020 10:20

Date Received: 06.02.2020 15:45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.03.2020 04:26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 04:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.03.2020 04:26		
4-Bromofluorobenzene	460-00-4	101	%	70-130	06.03.2020 04:26		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

MB Sample Id: 7704601-1-BLK

Matrix: Solid

LCS Sample Id: 7704601-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704601-1-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	252	101	253	101	90-110	0	20	mg/kg	06.02.2020 14:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	202	301	90	301	90	90-110	0	20	mg/kg	06.02.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663245-001

Matrix: Soil

MS Sample Id: 663245-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663245-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	682	200	871	95	870	94	90-110	0	20	mg/kg	06.02.2020 17:44	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

MB Sample Id: 7704607-1-BLK

Matrix: Solid

LCS Sample Id: 7704607-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704607-1-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	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1040	104	70-135	1	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		120		120		70-135	%	06.02.2020 10:39
o-Terphenyl	98		105		103		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Solid

MB Sample Id: 7704607-1-BLK

Prep Method: SW8015P

Date Prep: 06.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Parent Sample Id: 663131-001

Matrix: Soil

MS Sample Id: 663131-001 S

Prep Method: SW8015P

Date Prep: 06.02.2020

MSD Sample Id: 663131-001 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)	<50.1	1000	1040	104	979	98	70-135	6	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	250	1000	1260	101	1200	95	70-135	5	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		108		70-135	%	06.02.2020 13:46
o-Terphenyl	93		84		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

MB Sample Id: 7704604-1-BLK

Matrix: Solid

LCS Sample Id: 7704604-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704604-1-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	0.108	108	0.104	104	70-130	4	35	mg/kg	06.02.2020 22:39	
Toluene	<0.00200	0.100	0.102	102	0.0989	99	70-130	3	35	mg/kg	06.02.2020 22:39	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0926	93	71-129	4	35	mg/kg	06.02.2020 22:39	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.190	95	70-135	3	35	mg/kg	06.02.2020 22:39	
o-Xylene	<0.00200	0.100	0.0998	100	0.0972	97	71-133	3	35	mg/kg	06.02.2020 22:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		107		109		70-130	%	06.02.2020 22:39
4-Bromofluorobenzene	97		91		92		70-130	%	06.02.2020 22:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0943	95	0.106	106	70-130	12	35	mg/kg	06.02.2020 23:19	
Toluene	<0.00199	0.0996	0.0845	85	0.101	101	70-130	18	35	mg/kg	06.02.2020 23:19	
Ethylbenzene	<0.00199	0.0996	0.0726	73	0.0944	94	71-129	26	35	mg/kg	06.02.2020 23:19	
m,p-Xylenes	<0.00398	0.199	0.147	74	0.192	96	70-135	27	35	mg/kg	06.02.2020 23:19	
o-Xylene	<0.00199	0.0996	0.0742	74	0.0983	98	71-133	28	35	mg/kg	06.02.2020 23:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	06.02.2020 23:19
4-Bromofluorobenzene	92		93		70-130	%	06.02.2020 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

Work Order No. 10603251

Hobbs, NM (575-392-7550) Phoenix AZ (480-355-0900) Atlanta GA (770-440-8800) Tampa FL (813-222-2200)

Page 1 of 1

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

[illegible]

No. of Containers	
A 8015)	
PA 0=8021)	
(EPA 300.0)	
TAT starts the day received by the	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (EP)	Chloride	Sample Comments
PH09	S	6-1-20	1010	2	1	X	X	X	
PH09A	S	6-1-20	1020	4	1	X	X	X	

[illegible]

TCLP / SPLP 6010: 8BCBA Sh As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Ni S Se V Zn

[illegible]

ce: 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 to Xenco. 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
		6/2/20 1545			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 03.45.00 PM

Work Order #: 663251

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:



Elizabeth McClellan

Date: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.03.2020



Certificate of Analysis Summary 663249

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 15:45

Report Date: 06.03.2020 12:14

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663249-001	663249-002				
	Field Id:	PH08	PH08A				
	Depth:	2- ft	4- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	06.02.2020 09:45	06.02.2020 09:55				
BTEX by EPA 8021B	Extracted:	06.02.2020 16:00	06.02.2020 16:00				
	Analyzed:	06.03.2020 02:43	06.03.2020 03:04				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00202 0.00202	<0.00199 0.00199				
	Toluene	<0.00202 0.00202	<0.00199 0.00199				
	Ethylbenzene	<0.00202 0.00202	<0.00199 0.00199				
	m,p-Xylenes	<0.00403 0.00403	<0.00398 0.00398				
	o-Xylene	<0.00202 0.00202	<0.00199 0.00199				
	Total Xylenes	<0.00202 0.00202	<0.00199 0.00199				
	Total BTEX	<0.00202 0.00202	<0.00199 0.00199				
Chloride by EPA 300	Extracted:	06.02.2020 16:00	06.02.2020 16:00				
	Analyzed:	06.02.2020 17:04	06.02.2020 17:12				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	382 9.98	437 9.96				
TPH by SW8015 Mod	Extracted:	06.02.2020 17:00	06.02.2020 17:00				
	Analyzed:	06.02.2020 19:18	06.02.2020 19:39				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.1 50.1	<50.2 50.2				
	Diesel Range Organics (DRO)	<50.1 50.1	<50.2 50.2				
	Motor Oil Range Hydrocarbons (MRO)	<50.1 50.1	<50.2 50.2				
	Total GRO-DRO	<50.1 50.1	<50.2 50.2				
	Total TPH	<50.1 50.1	<50.2 50.2				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663249

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663249**

ADU Hondo

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 XENCO Report Number(s) 663249. 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 XENCO Laboratories. 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. 663249 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663249

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH08	S	06.02.2020 09:45	2 ft	663249-001
PH08A	S	06.02.2020 09:55	4 ft	663249-002



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663249

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663249

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH08** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663249-001 Date Collected: 06.02.2020 09:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:00 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	382	9.98	mg/kg	06.02.2020 17:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.02.2020 19:18	
o-Terphenyl	84-15-1	97	%	70-135	06.02.2020 19:18	



Certificate of Analytical Results 663249

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH08**
Lab Sample Id: 663249-001

Matrix: Soil
Date Collected: 06.02.2020 09:45

Date Received: 06.02.2020 15:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127761

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.03.2020 02:43	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 02:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.03.2020 02:43	
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 02:43	



Certificate of Analytical Results 663249

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH08A** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663249-002 Date Collected: 06.02.2020 09:55 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:00 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	437	9.96	mg/kg	06.02.2020 17:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127798

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	06.02.2020 19:39	
o-Terphenyl	84-15-1	90	%	70-135	06.02.2020 19:39	



Certificate of Analytical Results 663249

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH08A**
Lab Sample Id: 663249-002

Matrix: Soil
Date Collected: 06.02.2020 09:55

Date Received: 06.02.2020 15:45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127761

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.03.2020 03:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.03.2020 03:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.03.2020 03:04		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 03:04		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

MB Sample Id: 7704601-1-BLK

Matrix: Solid

LCS Sample Id: 7704601-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704601-1-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	252	101	253	101	90-110	0	20	mg/kg	06.02.2020 14:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	202	301	90	301	90	90-110	0	20	mg/kg	06.02.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663245-001

Matrix: Soil

MS Sample Id: 663245-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663245-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	682	200	871	95	870	94	90-110	0	20	mg/kg	06.02.2020 17:44	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

MB Sample Id: 7704607-1-BLK

Matrix: Solid

LCS Sample Id: 7704607-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704607-1-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	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1040	104	70-135	1	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		120		120		70-135	%	06.02.2020 10:39
o-Terphenyl	98		105		103		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Matrix: Solid

MB Sample Id: 7704607-1-BLK

Prep Method: SW8015P

Date Prep: 06.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

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.

ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127798

Parent Sample Id: 663131-001

Matrix: Soil

MS Sample Id: 663131-001 S

Prep Method: SW8015P

Date Prep: 06.02.2020

MSD Sample Id: 663131-001 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)	<50.1	1000	1040	104	979	98	70-135	6	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	250	1000	1260	101	1200	95	70-135	5	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		108		70-135	%	06.02.2020 13:46
o-Terphenyl	93		84		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

MB Sample Id: 7704604-1-BLK

Matrix: Solid

LCS Sample Id: 7704604-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704604-1-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	0.108	108	0.104	104	70-130	4	35	mg/kg	06.02.2020 22:39	
Toluene	<0.00200	0.100	0.102	102	0.0989	99	70-130	3	35	mg/kg	06.02.2020 22:39	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0926	93	71-129	4	35	mg/kg	06.02.2020 22:39	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.190	95	70-135	3	35	mg/kg	06.02.2020 22:39	
o-Xylene	<0.00200	0.100	0.0998	100	0.0972	97	71-133	3	35	mg/kg	06.02.2020 22:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		107		109		70-130	%	06.02.2020 22:39
4-Bromofluorobenzene	97		91		92		70-130	%	06.02.2020 22:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0943	95	0.106	106	70-130	12	35	mg/kg	06.02.2020 23:19	
Toluene	<0.00199	0.0996	0.0845	85	0.101	101	70-130	18	35	mg/kg	06.02.2020 23:19	
Ethylbenzene	<0.00199	0.0996	0.0726	73	0.0944	94	71-129	26	35	mg/kg	06.02.2020 23:19	
m,p-Xylenes	<0.00398	0.199	0.147	74	0.192	96	70-135	27	35	mg/kg	06.02.2020 23:19	
o-Xylene	<0.00199	0.0996	0.0742	74	0.0983	98	71-133	28	35	mg/kg	06.02.2020 23:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	06.02.2020 23:19
4-Bromofluorobenzene	92		93		70-130	%	06.02.2020 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: 1863249

Page 1 of 1
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Work Order Comments	
Program: UST/PST	☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT ☐ Other:

Project Name:	Adv Honda	Turn Around	ANALYSIS REQUEST							Work Order Notes
Project Number:	012920017	Routine ☒								
P.O. Number:		Rush:								
Sampler's Name:	Spencer Lo	Due Date:								

SAMPLE RECEIPT				Temp Blank:	Yes / No	Wet Ice:	Yes / No
Temperature (°C):	5.4 Thermometer ID						
Received Intact:	yes No T-NH-007						
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	-0.2		
Sample Custody Seals:	Yes	No	N/A	Total Containers:	2		

Number of Containers

(EPA 8015)

(EPA 0=8021)

de (EPA 300.0)

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E)	BTEX	Chloride	Sample Comments
PH08	S	6.2.20	945	2'	1	X	X	X	
PH08A	S	6.2.20	955	4'	1	X	X	X	

[illegible]

ce: 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 to Xenco. 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
		6/2/20 1545			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 03.45.00 PM

Work Order #: 663249

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:



Elizabeth McClellan

Date: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.03.2020



Certificate of Analysis Summary 663252

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 15:45

Report Date: 06.03.2020 11:52

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	663252-001	663252-002	663252-003	663252-004		
	Field Id:	PH10	PH10A	PH11	PH11A		
	Depth:	2- ft	4- ft	2- ft	4- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	06.02.2020 10:35	06.02.2020 10:45	06.02.2020 13:50	06.02.2020 14:00		
BTEX by EPA 8021B	Extracted:	06.02.2020 16:00	06.02.2020 16:00	06.02.2020 16:00	06.02.2020 16:00		
	Analyzed:	06.03.2020 04:46	06.03.2020 05:06	06.03.2020 05:27	06.03.2020 05:47		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
m,p-Xylenes		<0.00400 0.00400	<0.00398 0.00398	<0.00403 0.00403	<0.00402 0.00402		
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	06.02.2020 16:30	06.02.2020 16:30	06.02.2020 16:30	06.02.2020 16:30		
	Analyzed:	06.02.2020 18:08	06.02.2020 18:16	06.02.2020 18:40	06.02.2020 18:48		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		20.9 10.0	33.4 10.1	37.7 9.98	193 9.92		
TPH by SW8015 Mod	Extracted:	06.02.2020 17:00	06.02.2020 17:00	06.02.2020 17:00	06.02.2020 17:00		
	Analyzed:	06.02.2020 18:57	06.02.2020 19:18	06.02.2020 19:39	06.02.2020 19:59		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.0 50.0		
Diesel Range Organics (DRO)		<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.0 50.0		
Total GRO-DRO		<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.0 50.0		
Total TPH		<50.2 50.2	<50.1 50.1	<50.2 50.2	<50.0 50.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663252

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663252**

ADU Hondo

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 XENCO Report Number(s) 663252. 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 XENCO Laboratories. 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. 663252 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH10	S	06.02.2020 10:35	2 ft	663252-001
PH10A	S	06.02.2020 10:45	4 ft	663252-002
PH11	S	06.02.2020 13:50	2 ft	663252-003
PH11A	S	06.02.2020 14:00	4 ft	663252-004



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663252

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH10** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663252-001 Date Collected: 06.02.2020 10:35 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.9	10.0	mg/kg	06.02.2020 18:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.02.2020 18:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.02.2020 18:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.02.2020 18:57	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.02.2020 18:57	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.02.2020 18:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	06.02.2020 18:57	
o-Terphenyl	84-15-1	106	%	70-135	06.02.2020 18:57	



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH10**
Lab Sample Id: 663252-001

Matrix: Soil
Date Collected: 06.02.2020 10:35

Date Received: 06.02.2020 15:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.03.2020 04:46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.03.2020 04:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 04:46	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.03.2020 04:46	



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH10A** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663252-002 Date Collected: 06.02.2020 10:45 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.4	10.1	mg/kg	06.02.2020 18:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	06.02.2020 19:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.02.2020 19:18	
o-Terphenyl	84-15-1	108	%	70-135	06.02.2020 19:18	



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH10A**
Lab Sample Id: 663252-002

Matrix: Soil
Date Collected: 06.02.2020 10:45

Date Received: 06.02.2020 15:45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127761

Prep Method: SW5035A

% Moisture:

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.03.2020 05:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.03.2020 05:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.03.2020 05:06		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.03.2020 05:06		



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH11** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663252-003 Date Collected: 06.02.2020 13:50 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	37.7	9.98	mg/kg	06.02.2020 18:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	06.02.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.02.2020 19:39	
o-Terphenyl	84-15-1	104	%	70-135	06.02.2020 19:39	



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH11**
Lab Sample Id: 663252-003

Matrix: Soil
Date Collected: 06.02.2020 13:50

Date Received: 06.02.2020 15:45
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.03.2020 05:27	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 05:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	06.03.2020 05:27		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 05:27		



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH11A**
Lab Sample Id: 663252-004

Matrix: Soil
Date Collected: 06.02.2020 14:00

Date Received: 06.02.2020 15:45
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127756

Date Prep: 06.02.2020 16:30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	193	9.92	mg/kg	06.02.2020 18:48		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127764

Date Prep: 06.02.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.02.2020 19:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.02.2020 19:59	
o-Terphenyl	84-15-1	105	%	70-135	06.02.2020 19:59	



Certificate of Analytical Results 663252

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH11A**
Lab Sample Id: 663252-004

Matrix: Soil
Date Collected: 06.02.2020 14:00

Date Received: 06.02.2020 15:45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.03.2020 05:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.03.2020 05:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.03.2020 05:47		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 05:47		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

MB Sample Id: 7704601-1-BLK

Matrix: Solid

LCS Sample Id: 7704601-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704601-1-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	252	101	253	101	90-110	0	20	mg/kg	06.02.2020 14:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	202	301	90	301	90	90-110	0	20	mg/kg	06.02.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663245-001

Matrix: Soil

MS Sample Id: 663245-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663245-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	682	200	871	95	870	94	90-110	0	20	mg/kg	06.02.2020 17:44	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

MB Sample Id: 7704608-1-BLK

Matrix: Solid

LCS Sample Id: 7704608-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704608-1-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	928	93	918	92	70-135	1	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		112		111		70-135	%	06.02.2020 10:39
o-Terphenyl	96		107		107		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Matrix: Solid

MB Sample Id: 7704608-1-BLK

Prep Method: SW8015P

Date Prep: 06.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Parent Sample Id: 663129-002

Matrix: Soil

MS Sample Id: 663129-002 S

Prep Method: SW8015P

Date Prep: 06.02.2020

MSD Sample Id: 663129-002 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)	<50.0	999	991	99	1010	102	70-135	2	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	<50.0	999	1100	110	1100	111	70-135	0	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		118		70-135	%	06.02.2020 13:46
o-Terphenyl	111		111		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

MB Sample Id: 7704604-1-BLK

Matrix: Solid

LCS Sample Id: 7704604-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704604-1-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	0.108	108	0.104	104	70-130	4	35	mg/kg	06.02.2020 22:39	
Toluene	<0.00200	0.100	0.102	102	0.0989	99	70-130	3	35	mg/kg	06.02.2020 22:39	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0926	93	71-129	4	35	mg/kg	06.02.2020 22:39	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.190	95	70-135	3	35	mg/kg	06.02.2020 22:39	
o-Xylene	<0.00200	0.100	0.0998	100	0.0972	97	71-133	3	35	mg/kg	06.02.2020 22:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		107		109		70-130	%	06.02.2020 22:39
4-Bromofluorobenzene	97		91		92		70-130	%	06.02.2020 22:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0943	95	0.106	106	70-130	12	35	mg/kg	06.02.2020 23:19	
Toluene	<0.00199	0.0996	0.0845	85	0.101	101	70-130	18	35	mg/kg	06.02.2020 23:19	
Ethylbenzene	<0.00199	0.0996	0.0726	73	0.0944	94	71-129	26	35	mg/kg	06.02.2020 23:19	
m,p-Xylenes	<0.00398	0.199	0.147	74	0.192	96	70-135	27	35	mg/kg	06.02.2020 23:19	
o-Xylene	<0.00199	0.0996	0.0742	74	0.0983	98	71-133	28	35	mg/kg	06.02.2020 23:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	06.02.2020 23:19
4-Bromofluorobenzene	92		93		70-130	%	06.02.2020 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

Work Order No: 10103257

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

[illegible][illegible][illegible][illegible]

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti H

[illegible]

cc: 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 to Xenco. 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 fees shall be non-refundable.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		04/21/2015 4:55			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 03.45.00 PM

Work Order #: 663252

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:



Elizabeth McClellan

Date: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.03.2020



Certificate of Analysis Summary 663254

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 06.02.2020 15:45

Report Date: 06.03.2020 11:52

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 663254-001 Field Id: PH05C Depth: 16- ft Matrix: SOIL Sampled: 06.02.2020 13:25					
BTEX by EPA 8021B	Extracted: 06.02.2020 16:00 Analyzed: 06.03.2020 06:08 Units/RL: mg/kg RL					
Benzene	<0.00202 0.00202					
Toluene	<0.00202 0.00202					
Ethylbenzene	<0.00202 0.00202					
m,p-Xylenes	<0.00403 0.00403					
o-Xylene	<0.00202 0.00202					
Total Xylenes	<0.00202 0.00202					
Total BTEX	<0.00202 0.00202					
Chloride by EPA 300	Extracted: 06.02.2020 16:30 Analyzed: 06.02.2020 18:00 Units/RL: mg/kg RL					
Chloride	709 9.98					
TPH by SW8015 Mod	Extracted: 06.02.2020 17:00 Analyzed: 06.02.2020 20:20 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<50.0 50.0					
Diesel Range Organics (DRO)	<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0					
Total GRO-DRO	<50.0 50.0					
Total TPH	<50.0 50.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Analytical Report 663254

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

06.03.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), 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 (T104704534-20-6)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.03.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **663254**

ADU Hondo

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 XENCO Report Number(s) 663254. 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 XENCO Laboratories. 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. 663254 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 XENCO Laboratories 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'. The signature is written in a cursive, flowing style.

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 663254

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH05C	S	06.02.2020 13:25	16 ft	663254-001



CASE NARRATIVE

Client Name: *LT Environmental, Inc.*

Project Name: *ADU Hondo*

Project ID: 012920017
Work Order Number(s): 663254

Report Date: 06.03.2020
Date Received: 06.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 663254

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05C** Matrix: Soil Date Received: 06.02.2020 15:45
 Lab Sample Id: 663254-001 Date Collected: 06.02.2020 13:25 Sample Depth: 16 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 06.02.2020 16:30 Basis: Wet Weight
 Seq Number: 3127756

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	709	9.98	mg/kg	06.02.2020 18:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 06.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3127764

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.02.2020 20:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.02.2020 20:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.02.2020 20:20	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	06.02.2020 20:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.02.2020 20:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.02.2020 20:20	
o-Terphenyl	84-15-1	104	%	70-135	06.02.2020 20:20	



Certificate of Analytical Results 663254

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **PH05C**
Lab Sample Id: 663254-001

Matrix: Soil
Date Collected: 06.02.2020 13:25

Date Received: 06.02.2020 15:45
Sample Depth: 16 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.02.2020 16:00

Basis: Wet Weight

Seq Number: 3127761

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.03.2020 06:08	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.03.2020 06:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	06.03.2020 06:08		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.03.2020 06:08		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

MB Sample Id: 7704601-1-BLK

Matrix: Solid

LCS Sample Id: 7704601-1-BKS

Prep Method: E300P

Date Prep: 06.02.2020

LCSD Sample Id: 7704601-1-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	252	101	253	101	90-110	0	20	mg/kg	06.02.2020 14:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	202	301	90	301	90	90-110	0	20	mg/kg	06.02.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3127756

Parent Sample Id: 663245-001

Matrix: Soil

MS Sample Id: 663245-001 S

Prep Method: E300P

Date Prep: 06.02.2020

MSD Sample Id: 663245-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	682	200	871	95	870	94	90-110	0	20	mg/kg	06.02.2020 17:44	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

MB Sample Id: 7704608-1-BLK

Matrix: Solid

LCS Sample Id: 7704608-1-BKS

Prep Method: SW8015P

Date Prep: 06.02.2020

LCSD Sample Id: 7704608-1-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	928	93	918	92	70-135	1	35	mg/kg	06.02.2020 10:39	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	06.02.2020 10:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		112		111		70-135	%	06.02.2020 10:39
o-Terphenyl	96		107		107		70-135	%	06.02.2020 10:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Matrix: Solid

MB Sample Id: 7704608-1-BLK

Prep Method: SW8015P

Date Prep: 06.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.02.2020 10:18	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127764

Parent Sample Id: 663129-002

Matrix: Soil

MS Sample Id: 663129-002 S

Prep Method: SW8015P

Date Prep: 06.02.2020

MSD Sample Id: 663129-002 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)	<50.0	999	991	99	1010	102	70-135	2	35	mg/kg	06.02.2020 13:46	
Diesel Range Organics (DRO)	<50.0	999	1100	110	1100	111	70-135	0	35	mg/kg	06.02.2020 13:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		118		70-135	%	06.02.2020 13:46
o-Terphenyl	111		111		70-135	%	06.02.2020 13:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

MB Sample Id: 7704604-1-BLK

Matrix: Solid

LCS Sample Id: 7704604-1-BKS

Prep Method: SW5035A

Date Prep: 06.02.2020

LCSD Sample Id: 7704604-1-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	0.108	108	0.104	104	70-130	4	35	mg/kg	06.02.2020 22:39	
Toluene	<0.00200	0.100	0.102	102	0.0989	99	70-130	3	35	mg/kg	06.02.2020 22:39	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0926	93	71-129	4	35	mg/kg	06.02.2020 22:39	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.190	95	70-135	3	35	mg/kg	06.02.2020 22:39	
o-Xylene	<0.00200	0.100	0.0998	100	0.0972	97	71-133	3	35	mg/kg	06.02.2020 22:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		107		109		70-130	%	06.02.2020 22:39
4-Bromofluorobenzene	97		91		92		70-130	%	06.02.2020 22:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127761

Parent Sample Id: 663131-009

Matrix: Soil

MS Sample Id: 663131-009 S

Prep Method: SW5035A

Date Prep: 06.02.2020

MSD Sample Id: 663131-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0943	95	0.106	106	70-130	12	35	mg/kg	06.02.2020 23:19	
Toluene	<0.00199	0.0996	0.0845	85	0.101	101	70-130	18	35	mg/kg	06.02.2020 23:19	
Ethylbenzene	<0.00199	0.0996	0.0726	73	0.0944	94	71-129	26	35	mg/kg	06.02.2020 23:19	
m,p-Xylenes	<0.00398	0.199	0.147	74	0.192	96	70-135	27	35	mg/kg	06.02.2020 23:19	
o-Xylene	<0.00199	0.0996	0.0742	74	0.0983	98	71-133	28	35	mg/kg	06.02.2020 23:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	06.02.2020 23:19
4-Bromofluorobenzene	92		93		70-130	%	06.02.2020 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.:

$u_{25} = 3249$
 $u_{26} = 3249$

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)-

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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:	slog@ltenv.com , dmoir@ltenv.com

6-20-2000) www.xenco.com Page _____ of _____

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐

State of Project:

Reporting Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: EDD ☐ ADAPT ☐ Other: _____

Project Name:	<i>Adv Honda</i>	Turn Around	ANALYSIS REQUEST						Work Order Notes
Project Number:	<i>012920017</i>	Routine ☒							
P.O. Number:		Rush:							
Sampler's Name:	<i>Spencer Lo</i>	Due Date:							

SAMPLE RECEIPT			
Temp Blank:	Yes	No	Wet Ice: ☒ Yes ☐ No
Temperature (°C):	5.6 Thermometer ID		
Received Intact:	☒ Yes ☐ No	T-166-007	
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Correction Factor: -0.2	
Sample Custody Seals:	Yes ☐ No ☒ N/A	Total Containers: 1	

of Containers

8015)

A 0=8021)

EPA 300.0)

TAT starts the day received by the

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA)	BTEX (EPA)	Chloride (EPA)	Lab, if received by 4:30pm	Sample Comments

Total	200.7 / 6010	200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Cs Cr Co Cu Ec Pb Mn Mg Ni K C .

Circle Method(s) and Metal(s) to be analyzed

ITCLP / 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. Payment for samples is due upon receipt of samples. Payment for analysis is due upon receipt of report. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco. Payment for samples is due upon receipt of samples. Payment for analysis is due upon receipt of report.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/2/20 15:45			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 06.02.2020 03.45.00 PM

Work Order #: 663254

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

Sample received in bulk container.

* 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: 06.02.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.03.2020

Certificate of Analysis Summary 668345



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Date Received in Lab: Mon 07.27.2020 16:59

Contact: Dan Moir

Report Date: 07.30.2020 09:59

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668345-001	668345-002	668345-003	668345-004	668345-005	668345-006
	<i>Field Id:</i>	SW18	SW17	SW16	SW19	SW20	FS01A
	<i>Depth:</i>	0-4 ft	0-4 ft	0-4 ft	0-4 ft	0-3 ft	3- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.27.2020 10:45	07.27.2020 11:10	07.27.2020 11:15	07.27.2020 13:30	07.27.2020 13:45	07.27.2020 14:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.28.2020 15:08	07.28.2020 15:08	07.28.2020 15:08	07.28.2020 15:08	07.28.2020 15:08	07.28.2020 15:08
	<i>Analyzed:</i>	07.28.2020 15:13	07.28.2020 15:34	07.28.2020 15:54	07.28.2020 16:15	07.28.2020 16:35	07.28.2020 16:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00404 0.00404	<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	07.28.2020 12:00	07.28.2020 12:00	07.28.2020 12:00	07.28.2020 12:00	07.28.2020 12:00	07.28.2020 12:00
	<i>Analyzed:</i>	07.28.2020 12:29	07.28.2020 12:36	07.28.2020 12:43	07.28.2020 12:50	07.28.2020 15:23	07.28.2020 13:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		26.6 10.0	25.4 9.94	28.8 10.1	182 9.98	38.4 9.94	300 9.94
TPH by SW8015 Mod	<i>Extracted:</i>	07.28.2020 10:30	07.28.2020 10:30	07.28.2020 10:30	07.28.2020 10:30	07.28.2020 10:30	07.28.2020 10:30
	<i>Analyzed:</i>	07.28.2020 12:02	07.28.2020 12:22	07.28.2020 12:43	07.28.2020 13:03	07.28.2020 12:02	07.28.2020 12:22
	<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	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.1 50.1
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.1 50.1
Total GRO-DRO		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.1 50.1
Total TPH		<50.2 50.2	<50.0 50.0	<50.3 50.3	<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 668345

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Mon 07.27.2020 16:59

Report Date: 07.30.2020 09:59

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	668345-007	668345-008	668345-009			
	Field Id:	FS02A	FS18	FS19			
	Depth:	3- ft	4- ft	4- ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	07.27.2020 14:10	07.27.2020 14:45	07.27.2020 15:00			
BTEX by EPA 8021B	Extracted:	07.28.2020 15:08	07.28.2020 15:08	07.28.2020 15:08			
	Analyzed:	07.28.2020 17:16	07.28.2020 18:23	07.28.2020 18:52			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
m,p-Xylenes		<0.00402 0.00402	<0.00400 0.00400	<0.00401 0.00401			
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200			
Chloride by EPA 300	Extracted:	07.28.2020 12:56	07.28.2020 12:56	07.28.2020 12:56			
	Analyzed:	07.28.2020 14:06	07.28.2020 14:13	07.28.2020 13:45			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		320 10.1	1220 10.1	1090 9.94			
TPH by SW8015 Mod	Extracted:	07.28.2020 10:30	07.28.2020 10:30	07.28.2020 13:15			
	Analyzed:	07.28.2020 12:43	07.28.2020 13:03	07.28.2020 13:23			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.3 50.3	<50.1 50.1			
Diesel Range Organics (DRO)		73.1 50.0	<50.3 50.3	<50.1 50.1			
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.3 50.3	<50.1 50.1			
Total GRO-DRO		73.1 50.0	<50.3 50.3	<50.1 50.1			
Total TPH		73.1 50.0	<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





Analytical Report 668345

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

07.30.2020

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)



07.30.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **668345**

ADU Hondo

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) 668345. 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. 668345 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 668345****LT Environmental, Inc., Arvada, CO**

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW18	S	07.27.2020 10:45	0 - 4 ft	668345-001
SW17	S	07.27.2020 11:10	0 - 4 ft	668345-002
SW16	S	07.27.2020 11:15	0 - 4 ft	668345-003
SW19	S	07.27.2020 13:30	0 - 4 ft	668345-004
SW20	S	07.27.2020 13:45	0 - 3 ft	668345-005
FS01A	S	07.27.2020 14:00	3 ft	668345-006
FS02A	S	07.27.2020 14:10	3 ft	668345-007
FS18	S	07.27.2020 14:45	4 ft	668345-008
FS19	S	07.27.2020 15:00	4 ft	668345-009



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo

Project ID: 012920017
Work Order Number(s): 668345

Report Date: 07.30.2020
Date Received: 07.27.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW18** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-001 Date Collected: 07.27.2020 10:45 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.6	10.0	mg/kg	07.28.2020 12:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.28.2020 12:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.28.2020 12:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.28.2020 12:02	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	07.28.2020 12:02	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.28.2020 12:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	07.28.2020 12:02	
o-Terphenyl	84-15-1	99	%	70-135	07.28.2020 12:02	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW18**
Lab Sample Id: 668345-001

Matrix: Soil
Date Collected: 07.27.2020 10:45

Date Received: 07.27.2020 16:59
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.28.2020 15:08

Basis: Wet Weight

Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.28.2020 15:13	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.28.2020 15:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.28.2020 15:13	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.28.2020 15:13	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW17** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-002 Date Collected: 07.27.2020 11:10 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.4	9.94	mg/kg	07.28.2020 12:36		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.28.2020 12:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.28.2020 12:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.28.2020 12:22	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	07.28.2020 12:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.28.2020 12:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	07.28.2020 12:22	
o-Terphenyl	84-15-1	96	%	70-135	07.28.2020 12:22	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW17** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-002 Date Collected: 07.27.2020 11:10 Sample Depth: 0 - 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 15:08 Basis: Wet Weight
 Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.28.2020 15:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.28.2020 15:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	07.28.2020 15:34		
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.28.2020 15:34		



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW16** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-003 Date Collected: 07.27.2020 11:15 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.8	10.1	mg/kg	07.28.2020 12:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	07.28.2020 12:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	07.28.2020 12:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	07.28.2020 12:43	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	07.28.2020 12:43	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	07.28.2020 12:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	07.28.2020 12:43	
o-Terphenyl	84-15-1	94	%	70-135	07.28.2020 12:43	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW16**
Lab Sample Id: 668345-003

Matrix: Soil
Date Collected: 07.27.2020 11:15

Date Received: 07.27.2020 16:59
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.28.2020 15:08

Basis: Wet Weight

Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	07.28.2020 15:54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.28.2020 15:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.28.2020 15:54	
4-Bromofluorobenzene	460-00-4	101	%	70-130	07.28.2020 15:54	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW19** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-004 Date Collected: 07.27.2020 13:30 Sample Depth: 0 - 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	182	9.98	mg/kg	07.28.2020 12:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.28.2020 13:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.28.2020 13:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.28.2020 13:03	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.28.2020 13:03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.28.2020 13:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	07.28.2020 13:03	
o-Terphenyl	84-15-1	94	%	70-135	07.28.2020 13:03	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW19** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-004 Date Collected: 07.27.2020 13:30 Sample Depth: 0 - 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 15:08 Basis: Wet Weight
 Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.28.2020 16:15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.28.2020 16:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.28.2020 16:15		
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.28.2020 16:15		



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW20** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-005 Date Collected: 07.27.2020 13:45 Sample Depth: 0 - 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.4	9.94	mg/kg	07.28.2020 15:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	07.28.2020 12:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	07.28.2020 12:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	07.28.2020 12:02	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	07.28.2020 12:02	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	07.28.2020 12:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	07.28.2020 12:02	
o-Terphenyl	84-15-1	99	%	70-135	07.28.2020 12:02	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **SW20** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-005 Date Collected: 07.27.2020 13:45 Sample Depth: 0 - 3 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 15:08 Basis: Wet Weight
 Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.28.2020 16:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.28.2020 16:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.28.2020 16:35		
1,4-Difluorobenzene	540-36-3	104	%	70-130	07.28.2020 16:35		



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS01A** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-006 Date Collected: 07.27.2020 14:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:00 Basis: Wet Weight
 Seq Number: 3132878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	300	9.94	mg/kg	07.28.2020 13:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.28.2020 12:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.28.2020 12:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.28.2020 12:22	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.28.2020 12:22	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.28.2020 12:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	07.28.2020 12:22	
o-Terphenyl	84-15-1	97	%	70-135	07.28.2020 12:22	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS01A**
Lab Sample Id: 668345-006

Matrix: Soil
Date Collected: 07.27.2020 14:00

Date Received: 07.27.2020 16:59
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.28.2020 15:08

Basis: Wet Weight

Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.28.2020 16:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.28.2020 16:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.28.2020 16:55	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.28.2020 16:55	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS02A** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-007 Date Collected: 07.27.2020 14:10 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:56 Basis: Wet Weight
 Seq Number: 3132880

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	320	10.1	mg/kg	07.28.2020 14:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.28.2020 12:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	73.1	50.0	mg/kg	07.28.2020 12:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.28.2020 12:43	U	1
Total GRO-DRO	PHC628	73.1	50.0	mg/kg	07.28.2020 12:43		1
Total TPH	PHC635	73.1	50.0	mg/kg	07.28.2020 12:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	07.28.2020 12:43	
o-Terphenyl	84-15-1	96	%	70-135	07.28.2020 12:43	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS02A**
Lab Sample Id: 668345-007

Matrix: Soil
Date Collected: 07.27.2020 14:10

Date Received: 07.27.2020 16:59
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.28.2020 15:08

Basis: Wet Weight

Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.28.2020 17:16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.28.2020 17:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	07.28.2020 17:16	
1,4-Difluorobenzene	540-36-3	98	%	70-130	07.28.2020 17:16	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS18** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-008 Date Collected: 07.27.2020 14:45 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:56 Basis: Wet Weight
 Seq Number: 3132880

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1220	10.1	mg/kg	07.28.2020 14:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 10:30 Basis: Wet Weight
 Seq Number: 3132881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	07.28.2020 13:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	07.28.2020 13:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	07.28.2020 13:03	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	07.28.2020 13:03	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	07.28.2020 13:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	07.28.2020 13:03	
o-Terphenyl	84-15-1	96	%	70-135	07.28.2020 13:03	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS18**
Lab Sample Id: 668345-008

Matrix: Soil
Date Collected: 07.27.2020 14:45

Date Received: 07.27.2020 16:59
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 07.28.2020 15:08

Basis: Wet Weight

Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.28.2020 18:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.28.2020 18:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	07.28.2020 18:23		
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.28.2020 18:23		



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS19** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-009 Date Collected: 07.27.2020 15:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 12:56 Basis: Wet Weight
 Seq Number: 3132880

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	9.94	mg/kg	07.28.2020 13:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 07.28.2020 13:15 Basis: Wet Weight
 Seq Number: 3132881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.28.2020 13:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.28.2020 13:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.28.2020 13:23	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	07.28.2020 13:23	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.28.2020 13:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	07.28.2020 13:23	
o-Terphenyl	84-15-1	97	%	70-135	07.28.2020 13:23	



Certificate of Analytical Results 668345

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS19** Matrix: Soil Date Received: 07.27.2020 16:59
 Lab Sample Id: 668345-009 Date Collected: 07.27.2020 15:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 07.28.2020 15:08 Basis: Wet Weight
 Seq Number: 3132941

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.28.2020 18:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.28.2020 18:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.28.2020 18:52		
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.28.2020 18:52		



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3132878

MB Sample Id: 7708136-1-BLK

Matrix: Solid

LCS Sample Id: 7708136-1-BKS

Prep Method: E300P

Date Prep: 07.28.2020

LCSD Sample Id: 7708136-1-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	269	108	266	106	90-110	1	20	mg/kg	07.28.2020 09:59	

Analytical Method: Chloride by EPA 300

Seq Number: 3132880

MB Sample Id: 7708215-1-BLK

Matrix: Solid

LCS Sample Id: 7708215-1-BKS

Prep Method: E300P

Date Prep: 07.28.2020

LCSD Sample Id: 7708215-1-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	269	108	265	106	90-110	1	20	mg/kg	07.28.2020 13:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3132878

Parent Sample Id: 668234-001

Matrix: Soil

MS Sample Id: 668234-001 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668234-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	65.4	201	260	97	257	97	90-110	1	20	mg/kg	07.28.2020 10:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3132878

Parent Sample Id: 668309-002

Matrix: Soil

MS Sample Id: 668309-002 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668309-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5960	200	6180	110	6180	109	90-110	0	20	mg/kg	07.28.2020 11:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3132880

Parent Sample Id: 668117-008

Matrix: Soil

MS Sample Id: 668117-008 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668117-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8870	202	9070	99	9090	109	90-110	0	20	mg/kg	07.28.2020 15:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3132880

Parent Sample Id: 668345-009

Matrix: Soil

MS Sample Id: 668345-009 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668345-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1090	200	1280	95	1290	100	90-110	1	20	mg/kg	07.28.2020 13:52	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132869

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.28.2020

MB Sample Id: 7708266-1-BLK

LCS Sample Id: 7708266-1-BKS

LCSD Sample Id: 7708266-1-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	926	93	917	92	70-135	1	35	mg/kg	07.28.2020 10:01	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1010	101	70-135	1	35	mg/kg	07.28.2020 10:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		112		110		70-135	%	07.28.2020 10:01
o-Terphenyl	96		103		106		70-135	%	07.28.2020 10:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132881

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.28.2020

MB Sample Id: 7708272-1-BLK

LCS Sample Id: 7708272-1-BKS

LCSD Sample Id: 7708272-1-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	1030	103	1060	106	70-135	3	35	mg/kg	07.28.2020 10:01	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1120	112	70-135	5	35	mg/kg	07.28.2020 10:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		122		119		70-135	%	07.28.2020 10:01
o-Terphenyl	103		109		113		70-135	%	07.28.2020 10:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132869

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.28.2020

MB Sample Id: 7708266-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.28.2020 09:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132881

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.28.2020

MB Sample Id: 7708272-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.28.2020 09:40	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132869

Parent Sample Id: 668311-001

Matrix: Soil

MS Sample Id: 668311-001 S

Prep Method: SW8015P

Date Prep: 07.28.2020

MSD Sample Id: 668311-001 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)	<50.2	1000	890	89	882	88	70-135	1	35	mg/kg	07.28.2020 11:01	
Diesel Range Organics (DRO)	1240	1000	2090	85	2030	79	70-135	3	35	mg/kg	07.28.2020 11:01	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		106		70-135	%	07.28.2020 11:01
o-Terphenyl	107		102		70-135	%	07.28.2020 11:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132881

Parent Sample Id: 668311-002

Matrix: Soil

MS Sample Id: 668311-002 S

Prep Method: SW8015P

Date Prep: 07.28.2020

MSD Sample Id: 668311-002 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)	<50.1	1000	1140	114	1050	104	70-135	8	35	mg/kg	07.28.2020 11:01	
Diesel Range Organics (DRO)	1830	1000	2870	104	2580	74	70-135	11	35	mg/kg	07.28.2020 11:01	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		116		70-135	%	07.28.2020 11:01
o-Terphenyl	111		102		70-135	%	07.28.2020 11:01

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132941

MB Sample Id: 7708218-1-BLK

Matrix: Solid

LCS Sample Id: 7708218-1-BKS

Prep Method: SW5035A

Date Prep: 07.28.2020

LCSD Sample Id: 7708218-1-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	0.101	101	70-130	0	35	mg/kg	07.28.2020 11:40	
Toluene	<0.00200	0.100	0.0962	96	0.0940	94	70-130	2	35	mg/kg	07.28.2020 11:40	
Ethylbenzene	<0.00200	0.100	0.0991	99	0.0998	100	71-129	1	35	mg/kg	07.28.2020 11:40	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.201	101	70-135	1	35	mg/kg	07.28.2020 11:40	
o-Xylene	<0.00200	0.100	0.102	102	0.101	101	71-133	1	35	mg/kg	07.28.2020 11:40	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		101		97		70-130	%	07.28.2020 11:40
4-Bromofluorobenzene	97		100		97		70-130	%	07.28.2020 11:40

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132941

Parent Sample Id: 668311-001

Matrix: Soil

MS Sample Id: 668311-001 S

Prep Method: SW5035A

Date Prep: 07.28.2020

MSD Sample Id: 668311-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00894	0.101	0.102	92	0.106	97	70-130	4	35	mg/kg	07.28.2020 13:01	
Toluene	0.00265	0.101	0.0976	94	0.0957	93	70-130	2	35	mg/kg	07.28.2020 13:01	
Ethylbenzene	0.0101	0.101	0.103	92	0.0906	81	71-129	13	35	mg/kg	07.28.2020 13:01	
m,p-Xylenes	0.00501	0.202	0.213	103	0.197	96	70-135	8	35	mg/kg	07.28.2020 13:01	
o-Xylene	0.00796	0.101	0.107	98	0.0992	91	71-133	8	35	mg/kg	07.28.2020 13:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		100		70-130	%	07.28.2020 13:01
4-Bromofluorobenzene	101		101		70-130	%	07.28.2020 13:01

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)

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 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) 565-3443 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: 6608345

www.xenco.com Page 1 of 1

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:	slm@ltenv.com dmoir@ltenv.com

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

Project Name:	ADU Honda	Turn Around	☒
Project Number:	D12920017	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Well Ice:	☒ Yes ☐ No
Temperature (°C):	4.8 / 4.6	Thermometer ID		
Received Intact:	☒ Yes ☐ No	Correction Factor:		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:		
Sample Custody Seals:	☒ Yes ☐ No	Total Containers:		

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA)	BTEX (EPA)	Chloride	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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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>	7/27/20 16:59			
		4			
		6			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.27.2020 04.59.00 PM

Work Order #: 668345

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)?	4.6
#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:



Elizabeth McClellan

Date: 07.28.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.28.2020

Certificate of Analysis Summary 669456



LT Environmental, Inc., Arvada, CO

Project Name: Adu Hondo

Project Id: 012920017

Date Received in Lab: Thu 08.06.2020 14:54

Contact: Dan Moir

Report Date: 08.10.2020 11:56

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	669456-001	669456-002	669456-003	669456-004	669456-005	
	Field Id:	BH03	BH03A	BH03B	BH03C	BH03D	
	Depth:	6- ft	12- ft	20- ft	24- ft	30- ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	08.06.2020 08:22	08.06.2020 08:27	08.06.2020 08:44	08.06.2020 08:58	08.06.2020 09:26	
BTEX by EPA 8021B	Extracted:	08.06.2020 16:55	08.06.2020 16:55	08.06.2020 16:55	08.06.2020 16:55	08.06.2020 16:55	
	Analyzed:	08.07.2020 00:56	08.07.2020 01:17	08.07.2020 01:37	08.07.2020 01:58	08.07.2020 02:18	
	Units/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	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
m,p-Xylenes		<0.00400 0.00400	<0.00404 0.00404	<0.00401 0.00401	<0.00403 0.00403	<0.00399 0.00399	
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Chloride by EPA 300	Extracted:	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	
	Analyzed:	08.06.2020 23:07	08.06.2020 23:13	08.06.2020 23:19	08.06.2020 23:24	08.06.2020 23:30	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		2110 49.6	9400 49.9	2010 50.4	1600 50.3	4820 50.4	
TPH by SW8015 Mod	Extracted:	08.06.2020 17:15	08.06.2020 17:15	08.06.2020 17:15	08.06.2020 17:15	08.06.2020 17:15	
	Analyzed:	08.07.2020 00:09	08.07.2020 00:29	08.07.2020 00:49	08.07.2020 01:10	08.07.2020 01:30	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.3 50.3	
Diesel Range Organics (DRO)		<50.1 50.1	98.3 50.2	<49.9 49.9	<50.3 50.3	<50.3 50.3	
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.3 50.3	<50.3 50.3	
Total GRO-DRO		<50.1 50.1	98.3 50.2	<49.9 49.9	<50.3 50.3	<50.3 50.3	
Total TPH		<50.1 50.1	98.3 50.2	<49.9 49.9	<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 669456

for

LT Environmental, Inc.

Project Manager: Dan Moir

Adu Hondo

012920017

08.10.2020

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)



08.10.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **669456**

Adu Hondo

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) 669456. 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. 669456 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 669456****LT Environmental, Inc., Arvada, CO**

Adu Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03	S	08.06.2020 08:22	6 ft	669456-001
BH03A	S	08.06.2020 08:27	12 ft	669456-002
BH03B	S	08.06.2020 08:44	20 ft	669456-003
BH03C	S	08.06.2020 08:58	24 ft	669456-004
BH03D	S	08.06.2020 09:26	30 ft	669456-005



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Adu Hondo

Project ID: 012920017
Work Order Number(s): 669456

Report Date: 08.10.2020
Date Received: 08.06.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03** Matrix: Soil Date Received: 08.06.2020 14:54
 Lab Sample Id: 669456-001 Date Collected: 08.06.2020 08:22 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2110	49.6	mg/kg	08.06.2020 23:07		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.06.2020 17:15 Basis: Wet Weight
 Seq Number: 3133852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.07.2020 00:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.07.2020 00:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.07.2020 00:09	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.07.2020 00:09	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.07.2020 00:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.07.2020 00:09	
o-Terphenyl	84-15-1	107	%	70-135	08.07.2020 00:09	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03**
Lab Sample Id: 669456-001

Matrix: Soil
Date Collected: 08.06.2020 08:22

Date Received: 08.06.2020 14:54
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MRB

Date Prep: 08.06.2020 16:55

Basis: Wet Weight

Seq Number: 3133865

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.07.2020 00:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.07.2020 00:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.07.2020 00:56	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.07.2020 00:56	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03A** Matrix: Soil Date Received: 08.06.2020 14:54
 Lab Sample Id: 669456-002 Date Collected: 08.06.2020 08:27 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9400	49.9	mg/kg	08.06.2020 23:13		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.06.2020 17:15 Basis: Wet Weight
 Seq Number: 3133852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.07.2020 00:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	98.3	50.2	mg/kg	08.07.2020 00:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.07.2020 00:29	U	1
Total GRO-DRO	PHC628	98.3	50.2	mg/kg	08.07.2020 00:29		1
Total TPH	PHC635	98.3	50.2	mg/kg	08.07.2020 00:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.07.2020 00:29	
o-Terphenyl	84-15-1	105	%	70-135	08.07.2020 00:29	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03A**
Lab Sample Id: 669456-002

Matrix: Soil
Date Collected: 08.06.2020 08:27

Date Received: 08.06.2020 14:54
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MRB

Date Prep: 08.06.2020 16:55

Basis: Wet Weight

Seq Number: 3133865

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.07.2020 01:17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.07.2020 01:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.07.2020 01:17	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.07.2020 01:17	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03B** Matrix: Soil Date Received: 08.06.2020 14:54
 Lab Sample Id: 669456-003 Date Collected: 08.06.2020 08:44 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2010	50.4	mg/kg	08.06.2020 23:19		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.06.2020 17:15 Basis: Wet Weight
 Seq Number: 3133852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.07.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.07.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.07.2020 00:49	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.07.2020 00:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.07.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.07.2020 00:49	
o-Terphenyl	84-15-1	110	%	70-135	08.07.2020 00:49	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03B**
Lab Sample Id: 669456-003

Matrix: Soil
Date Collected: 08.06.2020 08:44

Date Received: 08.06.2020 14:54
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MRB

Date Prep: 08.06.2020 16:55

Basis: Wet Weight

Seq Number: 3133865

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.07.2020 01:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.07.2020 01:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.07.2020 01:37	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.07.2020 01:37	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03C** Matrix: Soil Date Received: 08.06.2020 14:54
 Lab Sample Id: 669456-004 Date Collected: 08.06.2020 08:58 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1600	50.3	mg/kg	08.06.2020 23:24		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.06.2020 17:15 Basis: Wet Weight
 Seq Number: 3133852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.07.2020 01:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.07.2020 01:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.07.2020 01:10	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	08.07.2020 01:10	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.07.2020 01:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.07.2020 01:10	
o-Terphenyl	84-15-1	106	%	70-135	08.07.2020 01:10	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03C**
Lab Sample Id: 669456-004

Matrix: Soil
Date Collected: 08.06.2020 08:58

Date Received: 08.06.2020 14:54
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MRB

Seq Number: 3133865

Prep Method: SW5035A

% Moisture:

Date Prep: 08.06.2020 16:55

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.07.2020 01:58	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.07.2020 01:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.07.2020 01:58	
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.07.2020 01:58	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03D** Matrix: Soil Date Received: 08.06.2020 14:54
 Lab Sample Id: 669456-005 Date Collected: 08.06.2020 09:26 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4820	50.4	mg/kg	08.06.2020 23:30		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.06.2020 17:15 Basis: Wet Weight
 Seq Number: 3133852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.07.2020 01:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.07.2020 01:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.07.2020 01:30	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	08.07.2020 01:30	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.07.2020 01:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.07.2020 01:30	
o-Terphenyl	84-15-1	106	%	70-135	08.07.2020 01:30	



Certificate of Analytical Results 669456

LT Environmental, Inc., Arvada, CO

Adu Hondo

Sample Id: **BH03D**
Lab Sample Id: 669456-005

Matrix: Soil
Date Collected: 08.06.2020 09:26

Date Received: 08.06.2020 14:54
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MRB

Seq Number: 3133865

Prep Method: SW5035A

% Moisture:

Date Prep: 08.06.2020 16:55

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.07.2020 02:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.07.2020 02:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.07.2020 02:18	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.07.2020 02:18	



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.

Adu Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3133869

MB Sample Id: 7708949-1-BLK

Matrix: Solid

LCS Sample Id: 7708949-1-BKS

Prep Method: E300P

Date Prep: 08.06.2020

LCSD Sample Id: 7708949-1-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	270	108	268	107	90-110	1	20	mg/kg	08.06.2020 21:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3133869

Parent Sample Id: 669401-018

Matrix: Soil

MS Sample Id: 669401-018 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669401-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	402	199	607	103	605	102	90-110	0	20	mg/kg	08.06.2020 21:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3133869

Parent Sample Id: 669401-028

Matrix: Soil

MS Sample Id: 669401-028 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669401-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	81.7	200	288	103	287	103	90-110	0	20	mg/kg	08.06.2020 22:45	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133852

MB Sample Id: 7708910-1-BLK

Matrix: Solid

LCS Sample Id: 7708910-1-BKS

Prep Method: SW8015P

Date Prep: 08.06.2020

LCSD Sample Id: 7708910-1-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	1130	113	1060	106	70-135	6	35	mg/kg	08.06.2020 18:44	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1150	115	70-135	5	35	mg/kg	08.06.2020 18:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		134		122		70-135	%	08.06.2020 18:44
o-Terphenyl	114		123		116		70-135	%	08.06.2020 18:44

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133852

Matrix: Solid

MB Sample Id: 7708910-1-BLK

Prep Method: SW8015P

Date Prep: 08.06.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.06.2020 18:24	

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



LT Environmental, Inc.

Adu Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3133852

Parent Sample Id: 669401-018

Matrix: Soil

MS Sample Id: 669401-018 S

Prep Method: SW8015P

Date Prep: 08.06.2020

MSD Sample Id: 669401-018 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	995	997	100	1010	101	70-135	1	35	mg/kg	08.06.2020 19:44	
Diesel Range Organics (DRO)	<49.8	995	1070	108	1080	108	70-135	1	35	mg/kg	08.06.2020 19:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		123		70-135	%	08.06.2020 19:44
o-Terphenyl	118		116		70-135	%	08.06.2020 19:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133865

MB Sample Id: 7708938-1-BLK

Matrix: Solid

LCS Sample Id: 7708938-1-BKS

Prep Method: SW5035A

Date Prep: 08.06.2020

LCSD Sample Id: 7708938-1-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	0.102	102	70-130	1	35	mg/kg	08.06.2020 17:39	
Toluene	<0.00200	0.100	0.0958	96	0.0958	96	70-130	0	35	mg/kg	08.06.2020 17:39	
Ethylbenzene	<0.00200	0.100	0.0998	100	0.0994	99	71-129	0	35	mg/kg	08.06.2020 17:39	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.203	102	70-135	0	35	mg/kg	08.06.2020 17:39	
o-Xylene	<0.00200	0.100	0.100	100	0.0999	100	71-133	0	35	mg/kg	08.06.2020 17:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		97		70-130	%	08.06.2020 17:39
4-Bromofluorobenzene	102		100		98		70-130	%	08.06.2020 17:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133865

Parent Sample Id: 669317-001

Matrix: Soil

MS Sample Id: 669317-001 S

Prep Method: SW5035A

Date Prep: 08.06.2020

MSD Sample Id: 669317-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.101	101	0.0977	97	70-130	3	35	mg/kg	08.06.2020 18:20	
Toluene	<0.00201	0.100	0.0904	90	0.0918	91	70-130	2	35	mg/kg	08.06.2020 18:20	
Ethylbenzene	<0.00201	0.100	0.0896	90	0.0957	95	71-129	7	35	mg/kg	08.06.2020 18:20	
m,p-Xylenes	<0.00402	0.201	0.179	89	0.194	97	70-135	8	35	mg/kg	08.06.2020 18:20	
o-Xylene	<0.00201	0.100	0.0862	86	0.0964	95	71-133	11	35	mg/kg	08.06.2020 18:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	08.06.2020 18:20
4-Bromofluorobenzene	103		98		70-130	%	08.06.2020 18:20

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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Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-1111
Hobbs, NM (575-392-7550)

Work Order No: 201708

Page 1 of 1

www.xenco.com

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:	slc@ltenv.com, dmoir@ltenv.com

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

Project Name:	ADU Honolulu	Turn Around	ANALYSIS REQUEST	Work Order Notes					
Project Number:	012920017	Routine			☒				
P.O. Number:		Rush:							
Sampler's Name:	Spencer Lo	Due Date:							
SAMPLE RECEIPT									
Temperature (°C):	46/44	Temp Blank:	Yes	No	Wet Ice:	Yes	No	Thermometer ID	
Received Intact:	Yes	No	T-200-005 - 0.2						
Cooler Custody Seals:	Yes	No	N/A		Correction Factor:				
Sample Custody Seals:	Yes	No	N/A		Total Containers:	5			
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]

	200.7/6010	200.8/6020:
8RCRA	13PPM	
AI	SD	
AS	BA	
B	CA	
C	CU	
CD	CU	
CE	CU	
CF	CU	
CG	CU	
CH	CU	
CI	CU	
CJ	CU	
CK	CU	
CL	CU	
CM	CU	
CN	CU	
CO	CU	
CP	CU	
CQ	CU	
CR	CU	
CS	CU	
CT	CU	
CU	CU	
CV	CU	
CW	CU	
CX	CU	
CY	CU	
CZ	CU	
DA	CU	
DB	CU	
DC	CU	
DD	CU	
DE	CU	
DF	CU	
DG	CU	
DH	CU	
DI	CU	
DJ	CU	
DK	CU	
DL	CU	
DM	CU	
DN	CU	
DO	CU	
DP	CU	
DQ	CU	
DR	CU	
DS	CU	
DT	CU	
DU	CU	
DV	CU	
DW	CU	
DX	CU	
DY	CU	
DZ	CU	
EA	CU	
EB	CU	
EC	CU	
ED	CU	
EE	CU	
EF	CU	
EG	CU	
EH	CU	
EI	CU	
EJ	CU	
EK	CU	
EL	CU	
EM	CU	
EN	CU	
EO	CU	
EP	CU	
EQ	CU	
ER	CU	
ES	CU	
ET	CU	
EU	CU	
EV	CU	
EW	CU	
EX	CU	
EY	CU	
EZ	CU	
FA	CU	
FB	CU	
FC	CU	
FD	CU	
FE	CU	
FF	CU	
FG	CU	
FH	CU	
FI	CU	
FJ	CU	
FK	CU	
FL	CU	
FM	CU	
FN	CU	
FO	CU	
FP	CU	
FQ	CU	
FR	CU	
FS	CU	
FT	CU	
FU	CU	
FV	CU	
FW	CU	
FX	CU	
FY	CU	
FZ	CU	
GA	CU	
GB	CU	
GC	CU	
GD	CU	
GE	CU	
GF	CU	
GG	CU	
GH	CU	
GI	CU	
GJ	CU	
GK	CU	
GL	CU	
GM	CU	
GN	CU	
GO	CU	
GP	CU	
GQ	CU	
GR	CU	
GS	CU	
GT	CU	
GU	CU	
GV	CU	
GW	CU	
GX	CU	
GY	CU	
GZ	CU	
HA	CU	
HB	CU	
HC	CU	
HD	CU	
HE	CU	
HF	CU	
HG	CU	
HH	CU	
HI	CU	
HJ	CU	
HK	CU	
HL	CU	
HM	CU	
HN	CU	
HO	CU	
HP	CU	
HQ	CU	
HA	CU	
HB	CU	
HC	CU	
HD	CU	
HE	CU	
HF	CU	

Circle Method(s) and Metal(s) to be analyzed	TCEP / SPLP 6010:
Sb As Ba Be Cd Cl Co Cu Pb Wm Mn Ni Se Ag Hg	8RCRA

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xencro, its affiliates and subcontractors. It assigns standard terms and conditions for service. Xencro 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 Xencro. There will be no charge for analysis of samples submitted to Xencro. A fee of \$50 will be levied for each sample 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	[Signature]	[Signature]	8/10/2014 54	2		
2				4		
3				6		
4						
5						

Revised Date 05/14/18 Rev. 2018

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.06.2020 02.54.00 PM

Work Order #: 669456

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)?	4.4
#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:



Elizabeth McClellan

Date: 08.06.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.07.2020

Certificate of Analysis Summary 669663



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Date Received in Lab: Mon 08.10.2020 14:40

Contact: Dan Moir

Report Date: 08.14.2020 20:44

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669663-001	669663-002	669663-003	669663-004	669663-005	669663-006
	<i>Field Id:</i>	BH01	BH01A	BH01B	BH01C	BH01D	BH01E
	<i>Depth:</i>	1- ft	6- ft	12- ft	20- ft	26- ft	30- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.10.2020 09:45	08.10.2020 09:55	08.10.2020 10:05	08.10.2020 10:15	08.10.2020 10:30	08.10.2020 10:50
BTEX by EPA 8021B	<i>Extracted:</i>	08.12.2020 17:28	08.12.2020 17:28	08.12.2020 17:28	08.12.2020 17:28	08.12.2020 17:28	08.12.2020 17:28
	<i>Analyzed:</i>	08.13.2020 05:06	08.13.2020 05:26	08.13.2020 05:47	08.13.2020 06:07	08.13.2020 06:27	08.13.2020 06:48
	<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	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00402 0.00402	<0.00397 0.00397	<0.00399 0.00399	<0.00397 0.00397	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	08.12.2020 12:34	08.12.2020 12:34	08.12.2020 12:34	08.12.2020 12:34	08.12.2020 12:34	08.12.2020 12:34
	<i>Analyzed:</i>	08.12.2020 15:56	08.12.2020 16:12	08.12.2020 16:18	08.12.2020 16:35	08.12.2020 16:40	08.12.2020 16:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.94 9.94	202 9.98	329 49.6	311 49.4	572 50.0	594 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	08.11.2020 12:00	08.11.2020 12:00	08.11.2020 12:00	08.13.2020 17:10	08.13.2020 17:10	08.13.2020 17:10
	<i>Analyzed:</i>	08.12.2020 15:08	08.12.2020 15:28	08.12.2020 15:49	08.13.2020 19:52	08.13.2020 20:53	08.13.2020 21:13
	<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	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.1 50.1
Total GRO-DRO		<50.3 50.3	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.1 50.1
Total TPH		<50.3 50.3	<49.8 49.8	<49.9 49.9	<49.8 49.8	<50.2 50.2	<50.1 50.1

BRL - Below Reporting Limit

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



Analytical Report 669663

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

08.14.2020

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)



08.14.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **669663**

ADU Hondo

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) 669663. 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. 669663 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 669663****LT Environmental, Inc., Arvada, CO**

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	08.10.2020 09:45	1 ft	669663-001
BH01A	S	08.10.2020 09:55	6 ft	669663-002
BH01B	S	08.10.2020 10:05	12 ft	669663-003
BH01C	S	08.10.2020 10:15	20 ft	669663-004
BH01D	S	08.10.2020 10:30	26 ft	669663-005
BH01E	S	08.10.2020 10:50	30 ft	669663-006



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo

Project ID: 012920017
Work Order Number(s): 669663

Report Date: 08.14.2020
Date Received: 08.10.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-001 Date Collected: 08.10.2020 09:45 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	08.12.2020 15:56	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 12:00 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.12.2020 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.12.2020 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.12.2020 15:08	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	08.12.2020 15:08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.12.2020 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.12.2020 15:08	
o-Terphenyl	84-15-1	112	%	70-135	08.12.2020 15:08	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01**
Lab Sample Id: 669663-001

Matrix: Soil
Date Collected: 08.10.2020 09:45

Date Received: 08.10.2020 14:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Seq Number: 3134422

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.13.2020 05:06	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.13.2020 05:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.13.2020 05:06	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.13.2020 05:06	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01A** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-002 Date Collected: 08.10.2020 09:55 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	202	9.98	mg/kg	08.12.2020 16:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 12:00 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 15:28	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.12.2020 15:28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	08.12.2020 15:28	
o-Terphenyl	84-15-1	116	%	70-135	08.12.2020 15:28	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01A**
Lab Sample Id: 669663-002

Matrix: Soil
Date Collected: 08.10.2020 09:55

Date Received: 08.10.2020 14:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Seq Number: 3134422

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.13.2020 05:26	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.13.2020 05:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.13.2020 05:26	
1,4-Difluorobenzene	540-36-3	91	%	70-130	08.13.2020 05:26	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01B** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-003 Date Collected: 08.10.2020 10:05 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	329	49.6	mg/kg	08.12.2020 16:18		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 12:00 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 15:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 15:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 15:49	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	08.12.2020 15:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 15:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 15:49	
o-Terphenyl	84-15-1	114	%	70-135	08.12.2020 15:49	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01B**
Lab Sample Id: 669663-003

Matrix: Soil
Date Collected: 08.10.2020 10:05

Date Received: 08.10.2020 14:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Seq Number: 3134422

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.13.2020 05:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.13.2020 05:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.13.2020 05:47	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.13.2020 05:47	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01C** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-004 Date Collected: 08.10.2020 10:15 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	311	49.4	mg/kg	08.12.2020 16:35		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight
 Seq Number: 3134576

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.13.2020 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.13.2020 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.13.2020 19:52	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.13.2020 19:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.13.2020 19:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	08.13.2020 19:52	
o-Terphenyl	84-15-1	120	%	70-135	08.13.2020 19:52	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01C**
Lab Sample Id: 669663-004

Matrix: Soil
Date Collected: 08.10.2020 10:15

Date Received: 08.10.2020 14:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Seq Number: 3134422

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.13.2020 06:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.13.2020 06:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.13.2020 06:07		
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.13.2020 06:07		



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01D** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-005 Date Collected: 08.10.2020 10:30 Sample Depth: 26 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	572	50.0	mg/kg	08.12.2020 16:40		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight
 Seq Number: 3134576

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.13.2020 20:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.13.2020 20:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.13.2020 20:53	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	08.13.2020 20:53	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.13.2020 20:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	08.13.2020 20:53	
o-Terphenyl	84-15-1	120	%	70-135	08.13.2020 20:53	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01D**
Lab Sample Id: 669663-005

Matrix: Soil
Date Collected: 08.10.2020 10:30

Date Received: 08.10.2020 14:40
Sample Depth: 26 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Seq Number: 3134422

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.13.2020 06:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.13.2020 06:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.13.2020 06:27		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.13.2020 06:27		



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01E** Matrix: Soil Date Received: 08.10.2020 14:40
 Lab Sample Id: 669663-006 Date Collected: 08.10.2020 10:50 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CAC % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 12:34 Basis: Wet Weight
 Seq Number: 3134397

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	594	10.0	mg/kg	08.12.2020 16:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight
 Seq Number: 3134576

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.13.2020 21:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.13.2020 21:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.13.2020 21:13	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	08.13.2020 21:13	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.13.2020 21:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.13.2020 21:13	
o-Terphenyl	84-15-1	113	%	70-135	08.13.2020 21:13	



Certificate of Analytical Results 669663

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **BH01E**
Lab Sample Id: 669663-006

Matrix: Soil
Date Collected: 08.10.2020 10:50

Date Received: 08.10.2020 14:40
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Tech: CAC

Analyst: MAB

Seq Number: 3134422

Prep Method: SW5035A

% Moisture:

Date Prep: 08.12.2020 17:28

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.13.2020 06:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.13.2020 06:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.13.2020 06:48		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.13.2020 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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3134397

MB Sample Id: 7709318-1-BLK

Matrix: Solid

LCS Sample Id: 7709318-1-BKS

Prep Method: E300P

Date Prep: 08.12.2020

LCSD Sample Id: 7709318-1-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	267	107	267	107	90-110	0	20	mg/kg	08.12.2020 14:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3134397

Parent Sample Id: 669618-001

Matrix: Soil

MS Sample Id: 669618-001 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	116	200	322	103	322	103	90-110	0	20	mg/kg	08.12.2020 14:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3134397

Parent Sample Id: 669663-001

Matrix: Soil

MS Sample Id: 669663-001 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669663-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	205	103	205	103	90-110	0	20	mg/kg	08.12.2020 16:01	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134308

MB Sample Id: 7709269-1-BLK

Matrix: Solid

LCS Sample Id: 7709269-1-BKS

Prep Method: SW8015P

Date Prep: 08.11.2020

LCSD Sample Id: 7709269-1-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	1040	104	70-135	2	35	mg/kg	08.12.2020 07:21	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1080	108	70-135	3	35	mg/kg	08.12.2020 07:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		124		125		70-135	%	08.12.2020 07:21
o-Terphenyl	106		115		116		70-135	%	08.12.2020 07:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134576

MB Sample Id: 7709462-1-BLK

Matrix: Solid

LCS Sample Id: 7709462-1-BKS

Prep Method: SW8015P

Date Prep: 08.13.2020

LCSD Sample Id: 7709462-1-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	1040	104	70-135	2	35	mg/kg	08.13.2020 19:12	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1070	107	70-135	1	35	mg/kg	08.13.2020 19:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		132		132		70-135	%	08.13.2020 19:12
o-Terphenyl	115		119		116		70-135	%	08.13.2020 19:12

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134308

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.11.2020

MB Sample Id: 7709269-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.12.2020 07:01	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134576

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.13.2020

MB Sample Id: 7709462-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.13.2020 18:52	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134308

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.11.2020

Parent Sample Id: 669624-124

MS Sample Id: 669624-124 S

MSD Sample Id: 669624-124 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	1010	101	1020	103	70-135	1	35	mg/kg	08.12.2020 08:23	
Diesel Range Organics (DRO)	<50.2	1000	1020	102	1050	106	70-135	3	35	mg/kg	08.12.2020 08:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	126		131		70-135	%	08.12.2020 08:23
o-Terphenyl	117		123		70-135	%	08.12.2020 08:23

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134576

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.13.2020

Parent Sample Id: 669663-004

MS Sample Id: 669663-004 S

MSD Sample Id: 669663-004 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	995	972	98	1010	101	70-135	4	35	mg/kg	08.13.2020 20:12	
Diesel Range Organics (DRO)	<49.8	995	987	99	1020	102	70-135	3	35	mg/kg	08.13.2020 20:12	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	134		131		70-135	%	08.13.2020 20:12
o-Terphenyl	119		119		70-135	%	08.13.2020 20:12

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.
ADU Hondo

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134422

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.12.2020

MB Sample Id: 7709316-1-BLK

LCS Sample Id: 7709316-1-BKS

LCSD Sample Id: 7709316-1-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	0.0936	94	0.0978	98	70-130	4	35	mg/kg	08.13.2020 02:08	
Toluene	<0.00200	0.100	0.0903	90	0.0931	93	70-130	3	35	mg/kg	08.13.2020 02:08	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.0965	97	71-129	5	35	mg/kg	08.13.2020 02:08	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.196	98	70-135	4	35	mg/kg	08.13.2020 02:08	
o-Xylene	<0.00200	0.100	0.0938	94	0.0963	96	71-133	3	35	mg/kg	08.13.2020 02:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		96		98		70-130	%	08.13.2020 02:08
4-Bromofluorobenzene	106		97		100		70-130	%	08.13.2020 02:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134422

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.12.2020

Parent Sample Id: 669856-021

MS Sample Id: 669856-021 S

MSD Sample Id: 669856-021 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	0.0978	98	70-130	7	35	mg/kg	08.13.2020 02:49	
Toluene	<0.00201	0.100	0.0986	99	0.0935	94	70-130	5	35	mg/kg	08.13.2020 02:49	
Ethylbenzene	<0.00201	0.100	0.101	101	0.0957	96	71-129	5	35	mg/kg	08.13.2020 02:49	
m,p-Xylenes	<0.00402	0.201	0.206	102	0.195	98	70-135	5	35	mg/kg	08.13.2020 02:49	
o-Xylene	<0.00201	0.100	0.101	101	0.0956	96	71-133	5	35	mg/kg	08.13.2020 02:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		100		70-130	%	08.13.2020 02:49
4-Bromofluorobenzene	102		103		70-130	%	08.13.2020 02:49

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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
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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.:

1631 / 245.1 / 7470 / 7471 : Hg

www.xenco.com Page 1 of 1

Project Manager: Dan Moir

Company Name: LT Environmental, Inc., Permian office

Address: 3300 North A Street

City, State ZIP: Midland, TX 79705

Phone: (432) 236-3849

Bill to: (if different)

Company Name: Kyle Little

Address: 3104 East Green Street

City, State ZIP: Carlsbad, NM 88220

Email: sluc@ltenv.com, dmair@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:

Project Name: ADV Honda

Project Number: 012920017

P.O. Number:

Sampler's Name: Spencer Lo

Turn Around

Routine ☒

Rush:

Due Date:

ANALYSIS REQUEST

Work Order Notes

SAMPLE RECEIPT

Temperature (°C): 4.0 / 4.4

Received Intact: Yes ☒ No ☐Cooler Custody Seals: Yes ☒ No ☐Sample Custody Seals: Yes ☒ No ☐Temp Blank: Yes ☒ No ☐Wet Ice: Yes ☒ No ☐

Thermometer ID: TMM007

Correction Factor: -0.2

Total Containers: 6

Sample Identification

Matrix

Date Sampled

Time Sampled

Depth

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0=8021)

Chloride (EPA 300.0)

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 service. 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

Relinquished by: (Signature)

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.10.2020 02.40.00 PM

Work Order #: 669663

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)?	4.4
#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:



Elizabeth McClellan

Date: 08.10.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.11.2020

Certificate of Analysis Summary 671126



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo

Project Id: 012920017

Date Received in Lab: Wed 08.26.2020 17:15

Contact: Dan Moir

Report Date: 09.01.2020 09:12

Project Location:

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671126-001	671126-002				
	Field Id:	FS20	FS21				
	Depth:	1-	1- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	08.26.2020 09:55	08.26.2020 10:05				
BTEX by EPA 8021B	Extracted:	08.27.2020 12:30	08.27.2020 12:30				
	Analyzed:	08.27.2020 13:48	08.27.2020 14:08				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00200 0.00200	<0.00200 0.00200				
Benzene		<0.00200 0.00200	<0.00200 0.00200				
Toluene		<0.00200 0.00200	<0.00200 0.00200				
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200				
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399				
o-Xylene		<0.00200 0.00200	<0.00200 0.00200				
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200				
Total BTEX		<0.00200 0.00200	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	08.27.2020 13:26	08.27.2020 13:26				
	Analyzed:	08.27.2020 17:38	08.27.2020 17:44				
	Units/RL:	mg/kg RL	mg/kg RL				
		166 9.98	176 9.94				
Chloride		166 9.98	176 9.94				
TPH by SW8015 Mod	Extracted:	08.27.2020 13:00	08.27.2020 13:00				
	Analyzed:	08.27.2020 14:27	08.27.2020 15:28				
	Units/RL:	mg/kg RL	mg/kg RL				
		<49.8 49.8	<50.0 50.0				
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0				
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0				
Total GRO-DRO		<49.8 49.8	<50.0 50.0				
Total TPH		<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 671126

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo

012920017

09.01.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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



09.01.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **671126**

ADU Hondo

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) 671126. 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. 671126 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 671126

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS20	S	08.26.2020 09:55	1	671126-001
FS21	S	08.26.2020 10:05	1 ft	671126-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo

Project ID: 012920017
Work Order Number(s): 671126

Report Date: 09.01.2020
Date Received: 08.26.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 671126

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS20** Matrix: Soil Date Received: 08.26.2020 17:15
 Lab Sample Id: 671126-001 Date Collected: 08.26.2020 09:55 Sample Depth: 1
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.27.2020 13:26 Basis: Wet Weight
 Seq Number: 3135807

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	166	9.98	mg/kg	08.27.2020 17:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.27.2020 13:00 Basis: Wet Weight
 Seq Number: 3135805

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.27.2020 14:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.27.2020 14:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.27.2020 14:27	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	08.27.2020 14:27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.27.2020 14:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	08.27.2020 14:27	
o-Terphenyl	84-15-1	113	%	70-135	08.27.2020 14:27	



Certificate of Analytical Results 671126

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS20**
Lab Sample Id: 671126-001

Matrix: Soil
Date Collected: 08.26.2020 09:55

Date Received: 08.26.2020 17:15
Sample Depth: 1

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.27.2020 12:30

Basis: Wet Weight

Seq Number: 3135786

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.27.2020 13:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.27.2020 13:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.27.2020 13:48	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.27.2020 13:48	



Certificate of Analytical Results 671126

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS21** Matrix: Soil Date Received: 08.26.2020 17:15
 Lab Sample Id: 671126-002 Date Collected: 08.26.2020 10:05 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.27.2020 13:26 Basis: Wet Weight
 Seq Number: 3135807

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	176	9.94	mg/kg	08.27.2020 17:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.27.2020 13:00 Basis: Wet Weight
 Seq Number: 3135805

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.27.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.27.2020 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.27.2020 15:28	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	08.27.2020 15:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.27.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	08.27.2020 15:28	
o-Terphenyl	84-15-1	120	%	70-135	08.27.2020 15:28	



Certificate of Analytical Results 671126

LT Environmental, Inc., Arvada, CO

ADU Hondo

Sample Id: **FS21**
Lab Sample Id: 671126-002

Matrix: Soil
Date Collected: 08.26.2020 10:05

Date Received: 08.26.2020 17:15
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.27.2020 12:30

Basis: Wet Weight

Seq Number: 3135786

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.27.2020 14:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.27.2020 14:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.27.2020 14:08	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.27.2020 14:08	



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.
ADU Hondo

Analytical Method: Chloride by EPA 300

Seq Number: 3135807

MB Sample Id: 7710281-1-BLK

Matrix: Solid

LCS Sample Id: 7710281-1-BKS

Prep Method: E300P

Date Prep: 08.27.2020

LCSD Sample Id: 7710281-1-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	265	106	90-110	1	20	mg/kg	08.27.2020 15:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3135807

Parent Sample Id: 671133-001

Matrix: Soil

MS Sample Id: 671133-001 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671133-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.8	199	212	101	211	100	90-110	0	20	mg/kg	08.27.2020 15:36	

Analytical Method: Chloride by EPA 300

Seq Number: 3135807

Parent Sample Id: 671133-011

Matrix: Soil

MS Sample Id: 671133-011 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671133-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	286	199	467	91	481	98	90-110	3	20	mg/kg	08.27.2020 16:54	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135805

MB Sample Id: 7710279-1-BLK

Matrix: Solid

LCS Sample Id: 7710279-1-BKS

Prep Method: SW8015P

Date Prep: 08.27.2020

LCSD Sample Id: 7710279-1-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	1000	100	964	96	70-135	4	35	mg/kg	08.27.2020 13:47	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1050	105	70-135	3	35	mg/kg	08.27.2020 13:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		127		132		70-135	%	08.27.2020 13:47
o-Terphenyl	114		127		118		70-135	%	08.27.2020 13:47

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135805

Matrix: Solid

MB Sample Id: 7710279-1-BLK

Prep Method: SW8015P

Date Prep: 08.27.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.27.2020 13:27	

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.
ADU Hondo

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135805

Parent Sample Id: 671126-001

Matrix: Soil

MS Sample Id: 671126-001 S

Prep Method: SW8015P

Date Prep: 08.27.2020

MSD Sample Id: 671126-001 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	999	947	95	969	97	70-135	2	35	mg/kg	08.27.2020 14:47	
Diesel Range Organics (DRO)	<50.0	999	1040	104	1050	105	70-135	1	35	mg/kg	08.27.2020 14:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	132		134		70-135	%	08.27.2020 14:47
o-Terphenyl	124		124		70-135	%	08.27.2020 14:47

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135786

MB Sample Id: 7710267-1-BLK

Matrix: Solid

LCS Sample Id: 7710267-1-BKS

Prep Method: SW5035A

Date Prep: 08.27.2020

LCSD Sample Id: 7710267-1-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	0.101	101	70-130	3	35	mg/kg	08.27.2020 11:30	
Toluene	<0.00200	0.100	0.100	100	0.0974	97	70-130	3	35	mg/kg	08.27.2020 11:30	
Ethylbenzene	<0.00200	0.100	0.106	106	0.102	102	71-129	4	35	mg/kg	08.27.2020 11:30	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.209	105	70-135	2	35	mg/kg	08.27.2020 11:30	
o-Xylene	<0.00200	0.100	0.105	105	0.102	102	71-133	3	35	mg/kg	08.27.2020 11:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		98		97		70-130	%	08.27.2020 11:30
4-Bromofluorobenzene	111		99		98		70-130	%	08.27.2020 11:30

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135786

Parent Sample Id: 671126-001

Matrix: Soil

MS Sample Id: 671126-001 S

Prep Method: SW5035A

Date Prep: 08.27.2020

MSD Sample Id: 671126-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.111	111	0.0960	96	70-130	14	35	mg/kg	08.27.2020 12:32	
Toluene	<0.00199	0.0996	0.104	104	0.0924	93	70-130	12	35	mg/kg	08.27.2020 12:32	
Ethylbenzene	<0.00199	0.0996	0.110	110	0.0957	96	71-129	14	35	mg/kg	08.27.2020 12:32	
m,p-Xylenes	<0.00398	0.199	0.220	111	0.195	98	70-135	12	35	mg/kg	08.27.2020 12:32	
o-Xylene	<0.00199	0.0996	0.108	108	0.0967	97	71-133	11	35	mg/kg	08.27.2020 12:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		70-130	%	08.27.2020 12:32
4-Bromofluorobenzene	101		102		70-130	%	08.27.2020 12:32

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

Work Order No: 1071126

Page 1 of 1
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Work Order Comments	
Program: UST/PST	☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT ☐ Other:

[illegible]

Number of Containers	
A 8015)	
PA 0=8021)	
(EPA 300.0)	
TAT starts the day received by the	

[illegible][illegible]

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.	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

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
	8.26.20 17:15		

Revised DTR 05/14/18 Gov. 2018

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 08.26.2020 05.15.00 PM

Work Order #: 671126

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
#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: 08.27.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.28.2020

Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Date Received in Lab: Wed 10.14.2020 16:40

Contact: Dan Moir

Report Date: 10.19.2020 13:06

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-001	675200-002	675200-003	675200-004	675200-005	675200-006
	<i>Field Id:</i>	BH02	BH02 A	BH02 B	BH02 C	BH02 D	BH02 E
	<i>Depth:</i>	6- ft	12- ft	20- ft	24- ft	30- ft	34- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.13.2020 09:30	10.13.2020 10:00	10.13.2020 10:20	10.13.2020 10:50	10.13.2020 11:20	10.13.2020 11:40
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01
	<i>Analyzed:</i>	10.15.2020 13:17	10.15.2020 13:40	10.15.2020 14:02	10.15.2020 14:25	10.15.2020 14:47	10.15.2020 15:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00403 0.00403	<0.00399 0.00399	<0.00402 0.00402	<0.00400 0.00400	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08
	<i>Analyzed:</i>	10.15.2020 17:13	10.15.2020 17:29	10.15.2020 17:35	10.15.2020 17:40	10.15.2020 17:46	10.15.2020 18:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		703 9.94	2120 49.5	911 49.7	1320 50.1	1400 50.2	1420 49.7
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 15:03	10.15.2020 16:43	10.15.2020 17:04	10.15.2020 17:23	10.15.2020 17:44	10.15.2020 18:04
	<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	<50.0 50.0	<50.1 50.1	<49.9 49.9	<50.2 50.2	<49.8 49.8
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.1 50.1	<49.9 49.9	<50.2 50.2	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.1 50.1	<49.9 49.9	<50.2 50.2	<49.8 49.8
Total GRO-DRO		<50.2 50.2	<50.0 50.0	<50.1 50.1	<49.9 49.9	<50.2 50.2	<49.8 49.8
Total TPH		<50.2 50.2	<50.0 50.0	<50.1 50.1	<49.9 49.9	<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

Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-007	675200-008	675200-009	675200-010	675200-011	675200-012
	<i>Field Id:</i>	BH02 F	BH03 E	BH03 F	BH05	BH05 A	BH05 B
	<i>Depth:</i>	36- ft	33- ft	36- ft	1- ft	6- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.13.2020 12:00	10.13.2020 13:15	10.13.2020 13:25	10.13.2020 14:30	10.13.2020 14:40	10.13.2020 14:45
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01
	<i>Analyzed:</i>	10.15.2020 15:32	10.15.2020 15:55	10.15.2020 16:17	10.15.2020 16:40	10.15.2020 17:58	10.15.2020 18:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
m,p-Xylenes		<0.00403 0.00403	<0.00404 0.00404	<0.00398 0.00398	<0.00396 0.00396	<0.00400 0.00400	<0.00403 0.00403
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08
	<i>Analyzed:</i>	10.15.2020 18:08	10.15.2020 18:13	10.15.2020 18:19	10.15.2020 18:24	10.15.2020 18:30	10.15.2020 18:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		924 50.4	1360 50.1	1090 50.1	137 49.8	483 9.94	530 49.6
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 18:25	10.15.2020 18:45	10.15.2020 19:26	10.15.2020 19:46	10.15.2020 20:07	10.15.2020 20:27
	<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	<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8
Diesel Range Organics (DRO)		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8
Total GRO-DRO		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8
Total TPH		<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.1 50.1	<50.1 50.1	<49.8 49.8

BRL - Below Reporting Limit

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Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-013	675200-014	675200-015	675200-016	675200-017	675200-018
	<i>Field Id:</i>	BH05 C	BH06	BH06 A	BH06 B	BH06 C	BH06 D
	<i>Depth:</i>	20- ft	1- ft	6- ft	12- ft	16- ft	20- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.13.2020 15:05	10.14.2020 08:30	10.14.2020 08:40	10.14.2020 09:10	10.14.2020 09:30	10.14.2020 09:40
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01	10.15.2020 10:01
	<i>Analyzed:</i>	10.15.2020 18:43	10.15.2020 19:05	10.15.2020 19:28	10.15.2020 19:50	10.15.2020 20:13	10.15.2020 20:35
	<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	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00402 0.00402	<0.00401 0.00401	<0.00403 0.00403	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 16:08
	<i>Analyzed:</i>	10.15.2020 18:52	10.15.2020 19:08	10.15.2020 19:14	10.15.2020 19:19	10.15.2020 19:24	10.15.2020 19:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		901 9.88	<9.98 9.98	558 49.8	406 9.92	552 9.96	413 10.0
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 20:47	10.15.2020 21:08	10.15.2020 21:27	10.15.2020 21:48	10.15.2020 22:08	10.15.2020 22:28
	<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	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total GRO-DRO		<49.8 49.8	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.8 49.8	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-019	675200-020	675200-021	675200-022	675200-023	675200-024
	<i>Field Id:</i>	BH06 E	BH06 F	BH06 G	BH06 H	BH04	BH04 A
	<i>Depth:</i>	24- ft	30- ft	33- ft	36- ft	1- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.14.2020 09:55	10.14.2020 10:05	10.14.2020 10:15	10.14.2020 10:25	10.14.2020 11:35	10.14.2020 11:45
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:01	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03
	<i>Analyzed:</i>	10.15.2020 20:58	10.15.2020 20:38	10.15.2020 13:18	10.15.2020 13:40	10.15.2020 14:03	10.15.2020 14:25
	<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	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00402 0.00402	<0.00403 0.00403	<0.00397 0.00397	<0.00400 0.00400
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 16:08	10.15.2020 16:08	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11
	<i>Analyzed:</i>	10.15.2020 19:35	10.15.2020 19:41	10.16.2020 16:43	10.16.2020 19:28	10.16.2020 19:34	10.16.2020 19:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		360 10.0	695 9.98	570 9.90	667 9.94	36.0 10.0	738 50.4
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 21:48	10.15.2020 22:08	10.15.2020 15:03	10.15.2020 16:02	10.15.2020 16:23	10.15.2020 16:43
	<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	<49.8 49.8	<50.0 50.0	<50.3 50.3	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.3 50.3	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.3 50.3	<49.8 49.8
Total GRO-DRO		<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.3 50.3	<49.8 49.8
Total TPH		<49.9 49.9	<49.8 49.8	<49.8 49.8	<50.0 50.0	<50.3 50.3	<49.8 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-025	675200-026	675200-027	675200-028	675200-029	675200-030
	<i>Field Id:</i>	BH04 B	BH04 C	BH04 D	BH04 E	BH04 F	BH04 G
	<i>Depth:</i>	12- ft	20- ft	24- ft	30- ft	33- ft	36- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.14.2020 11:55	10.14.2020 12:15	10.14.2020 12:30	10.14.2020 12:45	10.14.2020 12:50	10.14.2020 13:00
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03
	<i>Analyzed:</i>	10.15.2020 14:48	10.15.2020 15:10	10.15.2020 15:33	10.15.2020 15:55	10.15.2020 16:18	10.15.2020 16:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402	<0.00401 0.00401	<0.00403 0.00403	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11
	<i>Analyzed:</i>	10.16.2020 17:23	10.16.2020 17:43	10.16.2020 17:49	10.16.2020 17:56	10.16.2020 18:02	10.16.2020 18:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		394 9.94	361 49.8	443 49.9	388 10.0	166 10.0	121 9.92
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 17:04	10.15.2020 17:23	10.15.2020 17:44	10.15.2020 18:04	10.15.2020 18:25	10.15.2020 18:45
	<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	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.2 50.2	<50.0 50.0
Diesel Range Organics (DRO)		<50.1 50.1	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.2 50.2	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.2 50.2	<50.0 50.0
Total GRO-DRO		<50.1 50.1	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.2 50.2	<50.0 50.0
Total TPH		<50.1 50.1	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.2 50.2	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 675200



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675200-031	675200-032	675200-033	675200-034	675200-035	675200-036
	<i>Field Id:</i>	BH07	BH07 A	BH07 B	BH07 C	BH07 E	BH07 F
	<i>Depth:</i>	1- ft	6- ft	12- ft	20- ft	30- ft	33- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.14.2020 14:15	10.14.2020 14:20	10.14.2020 14:30	10.14.2020 14:45	10.14.2020 15:10	10.14.2020 15:25
BTEX by EPA 8021B	<i>Extracted:</i>	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03	10.15.2020 10:03
	<i>Analyzed:</i>	10.15.2020 18:01	10.15.2020 18:23	10.15.2020 18:46	10.15.2020 19:08	10.15.2020 19:30	10.15.2020 19:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00400 0.00400	<0.00404 0.00404	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11	10.15.2020 13:11
	<i>Analyzed:</i>	10.16.2020 18:16	10.16.2020 18:35	10.16.2020 18:42	10.16.2020 19:02	10.16.2020 19:08	10.16.2020 19:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.94 9.94	423 9.98	447 50.1	267 49.7	209 49.9	235 9.96
TPH by SW8015 Mod	<i>Extracted:</i>	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30	10.15.2020 14:30
	<i>Analyzed:</i>	10.15.2020 19:26	10.15.2020 19:46	10.15.2020 20:07	10.15.2020 20:27	10.15.2020 20:47	10.15.2020 21:08
	<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	<49.8 49.8	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.0 50.0
Diesel Range Organics (DRO)		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.0 50.0
Total GRO-DRO		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.0 50.0
Total TPH		<50.1 50.1	<49.8 49.8	<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 675200

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.19.2020 13:06

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 675200-037 Field Id: BH07 G Depth: 36- ft Matrix: SOIL Sampled: 10.14.2020 15:35					
BTEX by EPA 8021B	Extracted: 10.15.2020 10:03 Analyzed: 10.15.2020 20:15 Units/RL: mg/kg RL					
Benzene	<0.00200 0.00200					
Toluene	<0.00200 0.00200					
Ethylbenzene	<0.00200 0.00200					
m,p-Xylenes	<0.00399 0.00399					
o-Xylene	<0.00200 0.00200					
Total Xylenes	<0.00200 0.00200					
Total BTEX	<0.00200 0.00200					
Chloride by EPA 300	Extracted: 10.15.2020 13:11 Analyzed: 10.16.2020 19:21 Units/RL: mg/kg RL					
Chloride	206 9.92					
TPH by SW8015 Mod	Extracted: 10.15.2020 14:30 Analyzed: 10.15.2020 21:27 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<49.9 49.9					
Diesel Range Organics (DRO)	<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9					
Total GRO-DRO	<49.9 49.9					
Total TPH	<49.9 49.9					

BRL - Below Reporting Limit

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





Analytical Report 675200

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

012920017

10.19.2020

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)



10.19.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **675200**

ADU Hondo Tester

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) 675200. 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. 675200 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 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH02	S	10.13.2020 09:30	6 ft	675200-001
BH02 A	S	10.13.2020 10:00	12 ft	675200-002
BH02 B	S	10.13.2020 10:20	20 ft	675200-003
BH02 C	S	10.13.2020 10:50	24 ft	675200-004
BH02 D	S	10.13.2020 11:20	30 ft	675200-005
BH02 E	S	10.13.2020 11:40	34 ft	675200-006
BH02 F	S	10.13.2020 12:00	36 ft	675200-007
BH03 E	S	10.13.2020 13:15	33 ft	675200-008
BH03 F	S	10.13.2020 13:25	36 ft	675200-009
BH05	S	10.13.2020 14:30	1 ft	675200-010
BH05 A	S	10.13.2020 14:40	6 ft	675200-011
BH05 B	S	10.13.2020 14:45	12 ft	675200-012
BH05 C	S	10.13.2020 15:05	20 ft	675200-013
BH06	S	10.14.2020 08:30	1 ft	675200-014
BH06 A	S	10.14.2020 08:40	6 ft	675200-015
BH06 B	S	10.14.2020 09:10	12 ft	675200-016
BH06 C	S	10.14.2020 09:30	16 ft	675200-017
BH06 D	S	10.14.2020 09:40	20 ft	675200-018
BH06 E	S	10.14.2020 09:55	24 ft	675200-019
BH06 F	S	10.14.2020 10:05	30 ft	675200-020
BH06 G	S	10.14.2020 10:15	33 ft	675200-021
BH06 H	S	10.14.2020 10:25	36 ft	675200-022
BH04	S	10.14.2020 11:35	1 ft	675200-023
BH04 A	S	10.14.2020 11:45	6 ft	675200-024
BH04 B	S	10.14.2020 11:55	12 ft	675200-025
BH04 C	S	10.14.2020 12:15	20 ft	675200-026
BH04 D	S	10.14.2020 12:30	24 ft	675200-027
BH04 E	S	10.14.2020 12:45	30 ft	675200-028
BH04 F	S	10.14.2020 12:50	33 ft	675200-029
BH04 G	S	10.14.2020 13:00	36 ft	675200-030
BH07	S	10.14.2020 14:15	1 ft	675200-031
BH07 A	S	10.14.2020 14:20	6 ft	675200-032
BH07 B	S	10.14.2020 14:30	12 ft	675200-033
BH07 C	S	10.14.2020 14:45	20 ft	675200-034
BH07 E	S	10.14.2020 15:10	30 ft	675200-035
BH07 F	S	10.14.2020 15:25	33 ft	675200-036
BH07 G	S	10.14.2020 15:35	36 ft	675200-037



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: 012920017
Work Order Number(s): 675200

Report Date: 10.19.2020
Date Received: 10.14.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-001 Date Collected: 10.13.2020 09:30 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	703	9.94	mg/kg	10.15.2020 17:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.15.2020 15:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.15.2020 15:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.15.2020 15:03	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.15.2020 15:03	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.15.2020 15:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.15.2020 15:03	
o-Terphenyl	84-15-1	98	%	70-135	10.15.2020 15:03	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02**
Lab Sample Id: 675200-001

Matrix: Soil
Date Collected: 10.13.2020 09:30

Date Received: 10.14.2020 16:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 13:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 13:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	84	%	70-130	10.15.2020 13:17		
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.15.2020 13:17		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 A** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-002 Date Collected: 10.13.2020 10:00 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2120	49.5	mg/kg	10.15.2020 17:29		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 16:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 16:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 16:43	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 16:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 16:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.15.2020 16:43	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 16:43	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 A**
Lab Sample Id: 675200-002

Matrix: Soil
Date Collected: 10.13.2020 10:00

Date Received: 10.14.2020 16:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 13:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	87	%	70-130	10.15.2020 13:40		
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.15.2020 13:40		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 B** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-003 Date Collected: 10.13.2020 10:20 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	911	49.7	mg/kg	10.15.2020 17:35		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.15.2020 17:04	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 17:04	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 B**
Lab Sample Id: 675200-003

Matrix: Soil
Date Collected: 10.13.2020 10:20

Date Received: 10.14.2020 16:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 14:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 14:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	10.15.2020 14:02		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 14:02		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 C** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-004 Date Collected: 10.13.2020 10:50 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	50.1	mg/kg	10.15.2020 17:40		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 17:23	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 17:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.15.2020 17:23	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 17:23	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 C**
Lab Sample Id: 675200-004

Matrix: Soil
Date Collected: 10.13.2020 10:50

Date Received: 10.14.2020 16:40
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.15.2020 14:25	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.15.2020 14:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	84	%	70-130	10.15.2020 14:25		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 14:25		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 D** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-005 Date Collected: 10.13.2020 11:20 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1400	50.2	mg/kg	10.15.2020 17:46		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.15.2020 17:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.15.2020 17:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.15.2020 17:44	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.15.2020 17:44	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.15.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	10.15.2020 17:44	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 17:44	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 D**
Lab Sample Id: 675200-005

Matrix: Soil
Date Collected: 10.13.2020 11:20

Date Received: 10.14.2020 16:40
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 14:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 14:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 14:47		
4-Bromofluorobenzene	460-00-4	90	%	70-130	10.15.2020 14:47		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 E** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-006 Date Collected: 10.13.2020 11:40 Sample Depth: 34 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1420	49.7	mg/kg	10.15.2020 18:02		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 18:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 18:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 18:04	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 18:04	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 18:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.15.2020 18:04	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 18:04	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 E**
Lab Sample Id: 675200-006

Matrix: Soil
Date Collected: 10.13.2020 11:40

Date Received: 10.14.2020 16:40
Sample Depth: 34 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 15:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 15:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.15.2020 15:10	
4-Bromofluorobenzene	460-00-4	85	%	70-130	10.15.2020 15:10	



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ADU Hondo Tester

Sample Id: **BH02 F** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-007 Date Collected: 10.13.2020 12:00 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	924	50.4	mg/kg	10.15.2020 18:08		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 18:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 18:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 18:25	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 18:25	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 18:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.15.2020 18:25	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 18:25	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02 F**
Lab Sample Id: 675200-007

Matrix: Soil
Date Collected: 10.13.2020 12:00

Date Received: 10.14.2020 16:40
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 15:32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 15:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	10.15.2020 15:32		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 15:32		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03 E** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-008 Date Collected: 10.13.2020 13:15 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1360	50.1	mg/kg	10.15.2020 18:13		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.15.2020 18:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.15.2020 18:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.15.2020 18:45	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.15.2020 18:45	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.15.2020 18:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	10.15.2020 18:45	
o-Terphenyl	84-15-1	96	%	70-135	10.15.2020 18:45	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03 E**
Lab Sample Id: 675200-008

Matrix: Soil
Date Collected: 10.13.2020 13:15

Date Received: 10.14.2020 16:40
Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	10.15.2020 15:55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	82	%	70-130	10.15.2020 15:55		
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.15.2020 15:55		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03 F** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-009 Date Collected: 10.13.2020 13:25 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	50.1	mg/kg	10.15.2020 18:19		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 19:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 19:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 19:26	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 19:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 19:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	10.15.2020 19:26	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 19:26	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03 F**
Lab Sample Id: 675200-009

Matrix: Soil
Date Collected: 10.13.2020 13:25

Date Received: 10.14.2020 16:40
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 16:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 16:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 16:17	
4-Bromofluorobenzene	460-00-4	90	%	70-130	10.15.2020 16:17	



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ADU Hondo Tester

Sample Id: **BH05** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-010 Date Collected: 10.13.2020 14:30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	137	49.8	mg/kg	10.15.2020 18:24		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 19:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 19:46	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 19:46	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 19:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	10.15.2020 19:46	
o-Terphenyl	84-15-1	92	%	70-135	10.15.2020 19:46	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05**
Lab Sample Id: 675200-010

Matrix: Soil
Date Collected: 10.13.2020 14:30

Date Received: 10.14.2020 16:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.15.2020 16:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	87	%	70-130	10.15.2020 16:40		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 16:40		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 A** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-011 Date Collected: 10.13.2020 14:40 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	483	9.94	mg/kg	10.15.2020 18:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.15.2020 20:07	
o-Terphenyl	84-15-1	90	%	70-135	10.15.2020 20:07	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 A**
Lab Sample Id: 675200-011

Matrix: Soil
Date Collected: 10.13.2020 14:40

Date Received: 10.14.2020 16:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 17:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 17:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.15.2020 17:58		
4-Bromofluorobenzene	460-00-4	83	%	70-130	10.15.2020 17:58		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 B** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-012 Date Collected: 10.13.2020 14:45 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	530	49.6	mg/kg	10.15.2020 18:46		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 20:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 20:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 20:27	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 20:27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 20:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	10.15.2020 20:27	
o-Terphenyl	84-15-1	88	%	70-135	10.15.2020 20:27	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 B**
Lab Sample Id: 675200-012

Matrix: Soil
Date Collected: 10.13.2020 14:45

Date Received: 10.14.2020 16:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 18:20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 18:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 18:20		
4-Bromofluorobenzene	460-00-4	87	%	70-130	10.15.2020 18:20		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 C** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-013 Date Collected: 10.13.2020 15:05 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	901	9.88	mg/kg	10.15.2020 18:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 20:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 20:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 20:47	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 20:47	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 20:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	10.15.2020 20:47	
o-Terphenyl	84-15-1	90	%	70-135	10.15.2020 20:47	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH05 C**
Lab Sample Id: 675200-013

Matrix: Soil
Date Collected: 10.13.2020 15:05

Date Received: 10.14.2020 16:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 18:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 18:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	10.15.2020 18:43		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 18:43		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-014 Date Collected: 10.14.2020 08:30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	10.15.2020 19:08	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 21:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 21:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 21:08	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 21:08	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 21:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.15.2020 21:08	
o-Terphenyl	84-15-1	90	%	70-135	10.15.2020 21:08	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06**
Lab Sample Id: 675200-014

Matrix: Soil
Date Collected: 10.14.2020 08:30

Date Received: 10.14.2020 16:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 19:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 19:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	10.15.2020 19:05		
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.15.2020 19:05		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 A** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-015 Date Collected: 10.14.2020 08:40 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	558	49.8	mg/kg	10.15.2020 19:14		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 21:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 21:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 21:27	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 21:27	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 21:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	10.15.2020 21:27	
o-Terphenyl	84-15-1	90	%	70-135	10.15.2020 21:27	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 A**
Lab Sample Id: 675200-015

Matrix: Soil
Date Collected: 10.14.2020 08:40

Date Received: 10.14.2020 16:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.15.2020 19:28	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.15.2020 19:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	10.15.2020 19:28		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 19:28		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 B** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-016 Date Collected: 10.14.2020 09:10 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	406	9.92	mg/kg	10.15.2020 19:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.15.2020 21:48	
o-Terphenyl	84-15-1	96	%	70-135	10.15.2020 21:48	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 B**
Lab Sample Id: 675200-016

Matrix: Soil
Date Collected: 10.14.2020 09:10

Date Received: 10.14.2020 16:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.15.2020 19:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 19:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 19:50	
4-Bromofluorobenzene	460-00-4	87	%	70-130	10.15.2020 19:50	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 C** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-017 Date Collected: 10.14.2020 09:30 Sample Depth: 16 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	552	9.96	mg/kg	10.15.2020 19:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 22:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 22:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 22:08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 22:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.15.2020 22:08	
o-Terphenyl	84-15-1	94	%	70-135	10.15.2020 22:08	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 C**
Lab Sample Id: 675200-017

Matrix: Soil
Date Collected: 10.14.2020 09:30

Date Received: 10.14.2020 16:40
Sample Depth: 16 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 20:13	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 20:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	70-130	10.15.2020 20:13	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 20:13	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 D** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-018 Date Collected: 10.14.2020 09:40 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	413	10.0	mg/kg	10.15.2020 19:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139820 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 22:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 22:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 22:28	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 22:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 22:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	10.15.2020 22:28	
o-Terphenyl	84-15-1	92	%	70-135	10.15.2020 22:28	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 D**
Lab Sample Id: 675200-018

Matrix: Soil
Date Collected: 10.14.2020 09:40

Date Received: 10.14.2020 16:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 20:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 20:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	85	%	70-130	10.15.2020 20:35		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 20:35		



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ADU Hondo Tester

Sample Id: **BH06 E** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-019 Date Collected: 10.14.2020 09:55 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	360	10.0	mg/kg	10.15.2020 19:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 21:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.15.2020 21:48	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 21:48	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 E**
Lab Sample Id: 675200-019

Matrix: Soil
Date Collected: 10.14.2020 09:55

Date Received: 10.14.2020 16:40
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:01

% Moisture:
Basis: Wet Weight

Seq Number: 3139827

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.15.2020 20:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.15.2020 20:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	10.15.2020 20:58	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 20:58	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 F** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-020 Date Collected: 10.14.2020 10:05 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 16:08 % Moisture:
 Seq Number: 3139835 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	695	9.98	mg/kg	10.15.2020 19:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 22:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 22:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 22:08	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 22:08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	10.15.2020 22:08	
o-Terphenyl	84-15-1	104	%	70-135	10.15.2020 22:08	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 F**
Lab Sample Id: 675200-020

Matrix: Soil
Date Collected: 10.14.2020 10:05

Date Received: 10.14.2020 16:40
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 20:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 20:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.15.2020 20:38	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.15.2020 20:38	



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ADU Hondo Tester

Sample Id: **BH06 G** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-021 Date Collected: 10.14.2020 10:15 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	570	9.90	mg/kg	10.16.2020 16:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 15:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 15:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 15:03	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 15:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 15:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	10.15.2020 15:03	
o-Terphenyl	84-15-1	108	%	70-135	10.15.2020 15:03	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 G**
Lab Sample Id: 675200-021

Matrix: Soil
Date Collected: 10.14.2020 10:15

Date Received: 10.14.2020 16:40
Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.15.2020 13:18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.15.2020 13:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.15.2020 13:18	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.15.2020 13:18	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 H** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-022 Date Collected: 10.14.2020 10:25 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	667	9.94	mg/kg	10.16.2020 19:28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 16:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 16:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 16:02	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 16:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 16:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.15.2020 16:02	
o-Terphenyl	84-15-1	107	%	70-135	10.15.2020 16:02	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH06 H**
Lab Sample Id: 675200-022

Matrix: Soil
Date Collected: 10.14.2020 10:25

Date Received: 10.14.2020 16:40
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 13:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 13:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.15.2020 13:40	
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.15.2020 13:40	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-023 Date Collected: 10.14.2020 11:35 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.0	10.0	mg/kg	10.16.2020 19:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.15.2020 16:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.15.2020 16:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.15.2020 16:23	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.15.2020 16:23	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.15.2020 16:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.15.2020 16:23	
o-Terphenyl	84-15-1	99	%	70-135	10.15.2020 16:23	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04**
Lab Sample Id: 675200-023

Matrix: Soil
Date Collected: 10.14.2020 11:35

Date Received: 10.14.2020 16:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.15.2020 14:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.15.2020 14:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	10.15.2020 14:03		
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.15.2020 14:03		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 A** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-024 Date Collected: 10.14.2020 11:45 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	738	50.4	mg/kg	10.16.2020 19:41		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 16:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 16:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 16:43	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 16:43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 16:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.15.2020 16:43	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 16:43	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 A**
Lab Sample Id: 675200-024

Matrix: Soil
Date Collected: 10.14.2020 11:45

Date Received: 10.14.2020 16:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 14:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 14:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	123	%	70-130	10.15.2020 14:25		
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.15.2020 14:25		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 B** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-025 Date Collected: 10.14.2020 11:55 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	394	9.94	mg/kg	10.16.2020 17:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 17:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.15.2020 17:04	
o-Terphenyl	84-15-1	103	%	70-135	10.15.2020 17:04	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 B**
Lab Sample Id: 675200-025

Matrix: Soil
Date Collected: 10.14.2020 11:55

Date Received: 10.14.2020 16:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 14:48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.15.2020 14:48	
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.15.2020 14:48	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 C** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-026 Date Collected: 10.14.2020 12:15 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	361	49.8	mg/kg	10.16.2020 17:43		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 17:23	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 17:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.15.2020 17:23	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 17:23	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 C**
Lab Sample Id: 675200-026

Matrix: Soil
Date Collected: 10.14.2020 12:15

Date Received: 10.14.2020 16:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.15.2020 15:10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.15.2020 15:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.15.2020 15:10		
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.15.2020 15:10		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 D** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-027 Date Collected: 10.14.2020 12:30 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	443	49.9	mg/kg	10.16.2020 17:49		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 17:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 17:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 17:44	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 17:44	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	10.15.2020 17:44	
o-Terphenyl	84-15-1	101	%	70-135	10.15.2020 17:44	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 D**
Lab Sample Id: 675200-027

Matrix: Soil
Date Collected: 10.14.2020 12:30

Date Received: 10.14.2020 16:40
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.15.2020 15:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 15:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.15.2020 15:33		
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.15.2020 15:33		



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 E** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-028 Date Collected: 10.14.2020 12:45 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	388	10.0	mg/kg	10.16.2020 17:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 18:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 18:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 18:04	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 18:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 18:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.15.2020 18:04	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 18:04	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 E**
Lab Sample Id: 675200-028

Matrix: Soil
Date Collected: 10.14.2020 12:45

Date Received: 10.14.2020 16:40
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.15.2020 15:55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 15:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.15.2020 15:55	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.15.2020 15:55	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 F** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-029 Date Collected: 10.14.2020 12:50 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	166	10.0	mg/kg	10.16.2020 18:02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	10.15.2020 18:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	10.15.2020 18:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	10.15.2020 18:25	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	10.15.2020 18:25	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	10.15.2020 18:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	10.15.2020 18:25	
o-Terphenyl	84-15-1	101	%	70-135	10.15.2020 18:25	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 F**
Lab Sample Id: 675200-029

Matrix: Soil
Date Collected: 10.14.2020 12:50

Date Received: 10.14.2020 16:40
Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 16:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 16:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.15.2020 16:18	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.15.2020 16:18	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 G** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-030 Date Collected: 10.14.2020 13:00 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	121	9.92	mg/kg	10.16.2020 18:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 18:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 18:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 18:45	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 18:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 18:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.15.2020 18:45	
o-Terphenyl	84-15-1	103	%	70-135	10.15.2020 18:45	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH04 G**
Lab Sample Id: 675200-030

Matrix: Soil
Date Collected: 10.14.2020 13:00

Date Received: 10.14.2020 16:40
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.15.2020 16:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.15.2020 16:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	10.15.2020 16:40	
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.15.2020 16:40	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-031 Date Collected: 10.14.2020 14:15 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	10.16.2020 18:16	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 19:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 19:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 19:26	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 19:26	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 19:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.15.2020 19:26	
o-Terphenyl	84-15-1	96	%	70-135	10.15.2020 19:26	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07**
Lab Sample Id: 675200-031

Matrix: Soil
Date Collected: 10.14.2020 14:15

Date Received: 10.14.2020 16:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 18:01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 18:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.15.2020 18:01	
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.15.2020 18:01	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 A** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-032 Date Collected: 10.14.2020 14:20 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	423	9.98	mg/kg	10.16.2020 18:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.15.2020 19:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.15.2020 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.15.2020 19:46	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.15.2020 19:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.15.2020 19:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.15.2020 19:46	
o-Terphenyl	84-15-1	103	%	70-135	10.15.2020 19:46	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 A**
Lab Sample Id: 675200-032

Matrix: Soil
Date Collected: 10.14.2020 14:20

Date Received: 10.14.2020 16:40
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 18:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.15.2020 18:23	
4-Bromofluorobenzene	460-00-4	120	%	70-130	10.15.2020 18:23	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 B** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-033 Date Collected: 10.14.2020 14:30 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	447	50.1	mg/kg	10.16.2020 18:42		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 20:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	10.15.2020 20:07	
o-Terphenyl	84-15-1	98	%	70-135	10.15.2020 20:07	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 B**
Lab Sample Id: 675200-033

Matrix: Soil
Date Collected: 10.14.2020 14:30

Date Received: 10.14.2020 16:40
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.15.2020 18:46	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.15.2020 18:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.15.2020 18:46	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.15.2020 18:46	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 C** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-034 Date Collected: 10.14.2020 14:45 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	267	49.7	mg/kg	10.16.2020 19:02		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.15.2020 20:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.15.2020 20:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.15.2020 20:27	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.15.2020 20:27	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.15.2020 20:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.15.2020 20:27	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 20:27	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 C**
Lab Sample Id: 675200-034

Matrix: Soil
Date Collected: 10.14.2020 14:45

Date Received: 10.14.2020 16:40
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.15.2020 19:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 19:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.15.2020 19:08	
4-Bromofluorobenzene	460-00-4	121	%	70-130	10.15.2020 19:08	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 E** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-035 Date Collected: 10.14.2020 15:10 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	209	49.9	mg/kg	10.16.2020 19:08		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.15.2020 20:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.15.2020 20:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.15.2020 20:47	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.15.2020 20:47	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.15.2020 20:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.15.2020 20:47	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 20:47	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 E**
Lab Sample Id: 675200-035

Matrix: Soil
Date Collected: 10.14.2020 15:10

Date Received: 10.14.2020 16:40
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	10.15.2020 19:30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.15.2020 19:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.15.2020 19:30	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.15.2020 19:30	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 F** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-036 Date Collected: 10.14.2020 15:25 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	235	9.96	mg/kg	10.16.2020 19:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.15.2020 21:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.15.2020 21:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.15.2020 21:08	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.15.2020 21:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.15.2020 21:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	10.15.2020 21:08	
o-Terphenyl	84-15-1	101	%	70-135	10.15.2020 21:08	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 F**
Lab Sample Id: 675200-036

Matrix: Soil
Date Collected: 10.14.2020 15:25

Date Received: 10.14.2020 16:40
Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.15.2020 19:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 19:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.15.2020 19:53		
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.15.2020 19:53		



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 G** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675200-037 Date Collected: 10.14.2020 15:35 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.15.2020 13:11 % Moisture:
 Seq Number: 3139947 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	206	9.92	mg/kg	10.16.2020 19:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.15.2020 14:30 % Moisture:
 Seq Number: 3139826 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.15.2020 21:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.15.2020 21:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.15.2020 21:27	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.15.2020 21:27	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.15.2020 21:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.15.2020 21:27	
o-Terphenyl	84-15-1	102	%	70-135	10.15.2020 21:27	



Certificate of Analytical Results 675200

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 G**
Lab Sample Id: 675200-037

Matrix: Soil
Date Collected: 10.14.2020 15:35

Date Received: 10.14.2020 16:40
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.15.2020 10:03

% Moisture:
Basis: Wet Weight

Seq Number: 3139830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.15.2020 20:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.15.2020 20:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.15.2020 20:15	
4-Bromofluorobenzene	460-00-4	115	%	70-130	10.15.2020 20:15	



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.
ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3139947

MB Sample Id: 7713341-1-BLK

Matrix: Solid

LCS Sample Id: 7713341-1-BKS

Prep Method: E300P

Date Prep: 10.15.2020

LCSD Sample Id: 7713341-1-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	258	103	90-110	2	20	mg/kg	10.16.2020 15:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3139835

MB Sample Id: 7713337-1-BLK

Matrix: Solid

LCS Sample Id: 7713337-1-BKS

Prep Method: E300P

Date Prep: 10.15.2020

LCSD Sample Id: 7713337-1-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	228	91	231	92	90-110	1	20	mg/kg	10.15.2020 16:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3139947

Parent Sample Id: 675200-021

Matrix: Soil

MS Sample Id: 675200-021 S

Prep Method: E300P

Date Prep: 10.15.2020

MSD Sample Id: 675200-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	570	199	780	106	773	103	90-110	1	20	mg/kg	10.16.2020 16:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3139947

Parent Sample Id: 675200-031

Matrix: Soil

MS Sample Id: 675200-031 S

Prep Method: E300P

Date Prep: 10.15.2020

MSD Sample Id: 675200-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.96	199	205	103	206	104	90-110	0	20	mg/kg	10.16.2020 18:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3139835

Parent Sample Id: 675200-001

Matrix: Soil

MS Sample Id: 675200-001 S

Prep Method: E300P

Date Prep: 10.15.2020

MSD Sample Id: 675200-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	703	200	883	90	886	92	90-110	0	20	mg/kg	10.15.2020 17:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3139835

Parent Sample Id: 675200-011

Matrix: Soil

MS Sample Id: 675200-011 S

Prep Method: E300P

Date Prep: 10.15.2020

MSD Sample Id: 675200-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	483	199	666	92	670	94	90-110	1	20	mg/kg	10.15.2020 18:35	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139820

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.15.2020

MB Sample Id: 7713360-1-BLK

LCS Sample Id: 7713360-1-BKS

LCSD Sample Id: 7713360-1-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	820	82	766	77	70-135	7	35	mg/kg	10.15.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	962	96	930	93	70-135	3	35	mg/kg	10.15.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		122		113		70-135	%	10.15.2020 13:55
o-Terphenyl	93		98		95		70-135	%	10.15.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139826

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.15.2020

MB Sample Id: 7713363-1-BLK

LCS Sample Id: 7713363-1-BKS

LCSD Sample Id: 7713363-1-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	962	96	979	98	70-135	2	35	mg/kg	10.15.2020 13:55	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1050	105	70-135	0	35	mg/kg	10.15.2020 13:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		118		118		70-135	%	10.15.2020 13:55
o-Terphenyl	100		105		103		70-135	%	10.15.2020 13:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139820

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.15.2020

MB Sample Id: 7713360-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.15.2020 13:34	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139826

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.15.2020

MB Sample Id: 7713363-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.15.2020 13:34	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139820

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.15.2020

Parent Sample Id: 675200-001

MS Sample Id: 675200-001 S

MSD Sample Id: 675200-001 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)	<50.2	1000	844	84	806	81	70-135	5	35	mg/kg	10.15.2020 15:22	
Diesel Range Organics (DRO)	<50.2	1000	1030	103	964	96	70-135	7	35	mg/kg	10.15.2020 15:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		121		70-135	%	10.15.2020 15:22
o-Terphenyl	104		99		70-135	%	10.15.2020 15:22

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139826

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.15.2020

Parent Sample Id: 675200-021

MS Sample Id: 675200-021 S

MSD Sample Id: 675200-021 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	1140	114	1030	104	70-135	10	35	mg/kg	10.15.2020 15:22	
Diesel Range Organics (DRO)	<50.2	1000	1240	124	1130	114	70-135	9	35	mg/kg	10.15.2020 15:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		127		70-135	%	10.15.2020 15:22
o-Terphenyl	119		113		70-135	%	10.15.2020 15:22

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139827

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.15.2020

MB Sample Id: 7713335-1-BLK

LCS Sample Id: 7713335-1-BKS

LCSD Sample Id: 7713335-1-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	0.102	102	0.100	100	70-130	2	35	mg/kg	10.15.2020 11:14	
Toluene	<0.00200	0.100	0.0996	100	0.0979	98	70-130	2	35	mg/kg	10.15.2020 11:14	
Ethylbenzene	<0.00200	0.100	0.0943	94	0.0921	92	71-129	2	35	mg/kg	10.15.2020 11:14	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.185	93	70-135	2	35	mg/kg	10.15.2020 11:14	
o-Xylene	<0.00200	0.100	0.0922	92	0.0905	91	71-133	2	35	mg/kg	10.15.2020 11:14	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		96		99		70-130	%	10.15.2020 11:14
4-Bromofluorobenzene	81		85		85		70-130	%	10.15.2020 11:14

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.
ADU Hondo Tester

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139830

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.15.2020

MB Sample Id: 7713336-1-BLK

LCS Sample Id: 7713336-1-BKS

LCSD Sample Id: 7713336-1-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	0.102	102	0.102	102	70-130	0	35	mg/kg	10.15.2020 10:15	
Toluene	<0.00200	0.100	0.0967	97	0.0986	99	70-130	2	35	mg/kg	10.15.2020 10:15	
Ethylbenzene	<0.00200	0.100	0.0994	99	0.0997	100	71-129	0	35	mg/kg	10.15.2020 10:15	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.202	101	70-135	1	35	mg/kg	10.15.2020 10:15	
o-Xylene	<0.00200	0.100	0.102	102	0.101	101	71-133	1	35	mg/kg	10.15.2020 10:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		99		100		70-130	%	10.15.2020 10:15
4-Bromofluorobenzene	110		111		108		70-130	%	10.15.2020 10:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139827

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.15.2020

Parent Sample Id: 675200-001

MS Sample Id: 675200-001 S

MSD Sample Id: 675200-001 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	0.0981	98	0.0939	94	70-130	4	35	mg/kg	10.15.2020 11:59	
Toluene	<0.00200	0.0998	0.0954	96	0.0922	93	70-130	3	35	mg/kg	10.15.2020 11:59	
Ethylbenzene	<0.00200	0.0998	0.0891	89	0.0854	86	71-129	4	35	mg/kg	10.15.2020 11:59	
m,p-Xylenes	<0.00399	0.200	0.179	90	0.172	86	70-135	4	35	mg/kg	10.15.2020 11:59	
o-Xylene	<0.00200	0.0998	0.0889	89	0.0872	88	71-133	2	35	mg/kg	10.15.2020 11:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	10.15.2020 11:59
4-Bromofluorobenzene	81		82		70-130	%	10.15.2020 11:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139830

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.15.2020

Parent Sample Id: 675200-021

MS Sample Id: 675200-021 S

MSD Sample Id: 675200-021 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	0.0977	98	0.106	105	70-130	8	35	mg/kg	10.15.2020 11:57	
Toluene	<0.00200	0.100	0.0934	93	0.0996	99	70-130	6	35	mg/kg	10.15.2020 11:57	
Ethylbenzene	<0.00200	0.100	0.0977	98	0.105	104	71-129	7	35	mg/kg	10.15.2020 11:57	
m,p-Xylenes	<0.00401	0.200	0.202	101	0.212	105	70-135	5	35	mg/kg	10.15.2020 11:57	
o-Xylene	<0.00200	0.100	0.101	101	0.103	102	71-133	2	35	mg/kg	10.15.2020 11:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		70-130	%	10.15.2020 11:57
4-Bromofluorobenzene	110		109		70-130	%	10.15.2020 11:57

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: 1075200

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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Page 1 of 4

Project Manager:	Den 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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	bdellill@ltenv.com

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

Project Name:	ABU Hando Test	Turn Around	
Project Number:	D12920017	Routine	☒
P.O. Number:	NW 2003542379	Rush:	
Sampler's Name:	Benjamin Bellill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	☒ Yes	☐ No	Wet Ice:	☒ Yes	☐ No
	Temperature (°C):	22/22.0	Thermometer ID		T-NM-009	
	Received Intact:	☒ Yes	☐ No	Correction Factor:	0.2	
	Cooler Custody Seals:	☒ Yes	☐ No	Total Containers:	37	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
SH02	S	10/13/20	0930	6'	1	☒	☒	☒		
SH02A			1000	12'		☒	☒	☒		
SH02B			1020	20'		☒	☒	☒		
SH02C			1050	24'		☒	☒	☒		
SH02D			1120	30'		☒	☒	☒		
SH02E			1140	34'		☒	☒	☒		
SH02F			1200	36'		☒	☒	☒		
SH03E			1315	33'		☒	☒	☒		
SH03F			1325	36'		☒	☒	☒		
SH05	S		1430	1'	1	☒	☒	☒		

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/14/20 @ 1610			



Chain of Custody

Work Order No: 1635200

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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Page 2 of 4

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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	bbeill@ltenv.com

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

Project Name:	ADP Hondo Test	Turn Around	☒
Project Number:	012920017	Routine	☒
P.O. Number:	NV 2005542379	Rush:	
Sampler's Name:	Benjamin Beill	Due Date:	

SAMPLE RECEIPT			
Temperature (°C):	Temp Blank:	Yes	No
Received Intact:	Yes	No	
Cooler Custody Seals:	Yes	No	
Sample Custody Seals:	Yes	No	
Thermometer ID		Correction Factor:	
Total Containers:		37	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST													Work Order Notes
BH05A	S	10/13/20	1440	6'	Number of Containers													
BH05B			1445	12'	TPH (EPA 8015)													
BH05C			1505	20'	BTEX (EPA 0=8021)													
BH06		10/14/20	0830	1'	Chloride (EPA 300.0)													
BH06A			0840	6'														
BH06B			0910	12'														
BH06C			0930	16'														
BH06D			0940	20'														
BH06E			0955	24'														
BH06F			1005	30'														

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	AI	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																												

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	10/14/2020			



Chain of Custody

Work Order No: 675200

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)794-1236
 Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 3 of 4

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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	bbell@xenv.com

ANALYSIS REQUEST

Work Order Notes

Project Name:	ADU Hards Tester	Turn Around	☒ Routine
Project Number:	0.2420017	Rush:	
P.O. Number:	NV 7003542379	Due Date:	
Sampler's Name:	Benjamin Bell		

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):				Thermometer ID		
Received Intact:	Yes	No		Corrected Factor		
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	39	
Sample Custody Seals:	Yes	No	N/A			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Num	TPH (	BTEX	Chlor												Sample Comments
BH06 G	S	10/14/20	10:15	33'	1	X	X	X												Discrete
BH06 H			10:25	36'																
BH04			11:35	1'																
BH04 A			11:45	6'																
BH04 B			11:55	12'																
BH04 C			12:15	20'																
BH04 D			12:30	24'																
BH04 E			12:45	30'																
BH04 F			12:50	33'																
BH04 G			1:20	36'																

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>BS Bell</i>	<i>Joe Culp</i>	10-14-2020			10/14/2020 1640
					2
					4
					6

Chain of Custody

Work Order No: 645200



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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	dbelill@ltenv.com

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

[illegible]

SAMPLE RECEIPT		Temp Blank:		Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Thermometer ID						
Received intact:	Yes	No	See Back					
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:				
Sample Custody Seals:	Yes	No	N/A	Total Containers:				
				37				

Number of Containers

PA 8015)

EPA 0=8021)

le (EPA 300.0)

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E)	BTEX (C)	Chloride	Sample Comments
3H07	S	10/14/20	1415	1'	1	X	X	X	Discrete
3H07A			1420	6'					
3H07B			1430	12'					
3H07C			1445	20'					
3H07E			1510	30'					
3H07F			1525	35'					
3H07G			1535	36'					

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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.		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	
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed			
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)
		10-14-2020 10/14/2006 1640	2
			4
			6

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10.14.2020 04.40.00 PM

Work Order #: 675200

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 *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: 10.15.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.16.2020

Certificate of Analysis Summary 675174

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Wed 10.14.2020 16:40

Report Date: 10.15.2020 14:06

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 675174-001 Field Id: BH07 D Depth: 24- ft Matrix: SOIL Sampled: 10.14.2020 14:55					
BTEX by EPA 8021B	Extracted: 10.14.2020 17:22 Analyzed: 10.14.2020 20:38 Units/RL: mg/kg RL					
Benzene	<0.00199 0.00199					
Toluene	<0.00199 0.00199					
Ethylbenzene	<0.00199 0.00199					
m,p-Xylenes	<0.00398 0.00398					
o-Xylene	<0.00199 0.00199					
Total Xylenes	<0.00199 0.00199					
Total BTEX	<0.00199 0.00199					
Chloride by EPA 300	Extracted: 10.14.2020 17:20 Analyzed: 10.14.2020 18:59 Units/RL: mg/kg RL					
Chloride	897 9.92					
TPH by SW8015 Mod	Extracted: 10.14.2020 17:30 Analyzed: 10.14.2020 19:53 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<50.1 50.1					
Diesel Range Organics (DRO)	<50.1 50.1					
Motor Oil Range Hydrocarbons (MRO)	<50.1 50.1					
Total GRO-DRO	<50.1 50.1					
Total TPH	<50.1 50.1					

BRL - Below Reporting Limit

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





Analytical Report 675174

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

012920017

10.15.2020

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)



10.15.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **675174**

ADU Hondo Tester

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) 675174. 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. 675174 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 675174

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH07 D	S	10.14.2020 14:55	24 ft	675174-001



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: 012920017
Work Order Number(s): 675174

Report Date: 10.15.2020
Date Received: 10.14.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 675174

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 D** Matrix: Soil Date Received: 10.14.2020 16:40
 Lab Sample Id: 675174-001 Date Collected: 10.14.2020 14:55 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.14.2020 17:20 % Moisture:
 Seq Number: 3139721 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	897	9.92	mg/kg	10.14.2020 18:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.14.2020 17:30 % Moisture:
 Seq Number: 3139729 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	10.14.2020 19:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	10.14.2020 19:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	10.14.2020 19:53	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	10.14.2020 19:53	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	10.14.2020 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	10.14.2020 19:53	
o-Terphenyl	84-15-1	96	%	70-135	10.14.2020 19:53	



Certificate of Analytical Results 675174

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH07 D**
Lab Sample Id: 675174-001

Matrix: Soil
Date Collected: 10.14.2020 14:55

Date Received: 10.14.2020 16:40
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.14.2020 17:22

% Moisture:
Basis: Wet Weight

Seq Number: 3139725

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.14.2020 20:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.14.2020 20:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.14.2020 20:38	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.14.2020 20:38	



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.
ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3139721

MB Sample Id: 7713286-1-BLK

Matrix: Solid

LCS Sample Id: 7713286-1-BKS

Prep Method: E300P

Date Prep: 10.14.2020

LCSD Sample Id: 7713286-1-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	264	106	263	105	90-110	0	20	mg/kg	10.14.2020 18:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3139721

Parent Sample Id: 675050-001

Matrix: Soil

MS Sample Id: 675050-001 S

Prep Method: E300P

Date Prep: 10.14.2020

MSD Sample Id: 675050-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.0	199	211	99	212	100	90-110	0	20	mg/kg	10.14.2020 18:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3139721

Parent Sample Id: 675175-007

Matrix: Soil

MS Sample Id: 675175-007 S

Prep Method: E300P

Date Prep: 10.14.2020

MSD Sample Id: 675175-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1740	200	1940	100	1920	91	90-110	1	20	mg/kg	10.14.2020 19:54	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139729

MB Sample Id: 7713288-1-BLK

Matrix: Solid

LCS Sample Id: 7713288-1-BKS

Prep Method: SW8015P

Date Prep: 10.14.2020

LCSD Sample Id: 7713288-1-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	813	81	800	80	70-135	2	35	mg/kg	10.14.2020 11:36	
Diesel Range Organics (DRO)	<50.0	1000	964	96	957	96	70-135	1	35	mg/kg	10.14.2020 11:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		102		101		70-135	%	10.14.2020 11:36
o-Terphenyl	94		99		99		70-135	%	10.14.2020 11:36

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139729

Matrix: Solid

MB Sample Id: 7713288-1-BLK

Prep Method: SW8015P

Date Prep: 10.14.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.14.2020 12:16	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139729

Parent Sample Id: 675174-001

Matrix: Soil

MS Sample Id: 675174-001 S

Prep Method: SW8015P

Date Prep: 10.14.2020

MSD Sample Id: 675174-001 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)	<50.2	1000	924	92	901	89	70-135	3	35	mg/kg	10.14.2020 20:13	
Diesel Range Organics (DRO)	<50.2	1000	1100	110	1080	107	70-135	2	35	mg/kg	10.14.2020 20:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		114		70-135	%	10.14.2020 20:13
o-Terphenyl	104		104		70-135	%	10.14.2020 20:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139725

MB Sample Id: 7713287-1-BLK

Matrix: Solid

LCS Sample Id: 7713287-1-BKS

Prep Method: SW5035A

Date Prep: 10.14.2020

LCSD Sample Id: 7713287-1-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	0.103	103	70-130	2	35	mg/kg	10.14.2020 17:36	
Toluene	<0.00200	0.100	0.0952	95	0.0978	98	70-130	3	35	mg/kg	10.14.2020 17:36	
Ethylbenzene	<0.00200	0.100	0.0963	96	0.100	100	71-129	4	35	mg/kg	10.14.2020 17:36	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.202	101	70-135	3	35	mg/kg	10.14.2020 17:36	
o-Xylene	<0.00200	0.100	0.0969	97	0.101	101	71-133	4	35	mg/kg	10.14.2020 17:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		99		103		70-130	%	10.14.2020 17:36
4-Bromofluorobenzene	105		108		108		70-130	%	10.14.2020 17:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139725

Parent Sample Id: 675174-001

Matrix: Soil

MS Sample Id: 675174-001 S

Prep Method: SW5035A

Date Prep: 10.14.2020

MSD Sample Id: 675174-001 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	0.103	103	0.0954	96	70-130	8	35	mg/kg	10.14.2020 19:18	
Toluene	<0.00200	0.100	0.0979	98	0.0902	90	70-130	8	35	mg/kg	10.14.2020 19:18	
Ethylbenzene	<0.00200	0.100	0.104	104	0.0968	97	71-129	7	35	mg/kg	10.14.2020 19:18	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.195	98	70-135	8	35	mg/kg	10.14.2020 19:18	
o-Xylene	<0.00200	0.100	0.103	103	0.0958	96	71-133	7	35	mg/kg	10.14.2020 19:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		70-130	%	10.14.2020 19:18
4-Bromofluorobenzene	108		109		70-130	%	10.14.2020 19:18

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

Work Order No: 675174

Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)
Hobbs, NM (505-382-7550)

Page 7 of _____

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

[illegible][illegible][illegible][illegible]

TCLP / SPLP 6010: 8BCBA Sh As Ba Be Cd Cr Co Cu Pb Ni Mn Mo

[illegible]

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 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
<i>[Signature]</i>	<i>[Signature]</i>	10/14/2016 4:10

Certificate of Analysis Summary 675400



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Date Received in Lab: Fri 10.16.2020 12:00

Contact: Dan Moir

Report Date: 10.19.2020 14:41

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	675400-001	675400-002	675400-003	675400-004	675400-005	675400-006
	<i>Field Id:</i>	BH08	BH08 A	BH08 B	BH08 C	BH08 D	BH08 E
	<i>Depth:</i>	1- ft	6- ft	12- ft	20- ft	24- ft	30- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.16.2020 08:40	10.16.2020 08:50	10.16.2020 09:00	10.16.2020 09:10	10.16.2020 09:30	10.16.2020 09:35
BTEX by EPA 8021B	<i>Extracted:</i>	10.16.2020 17:48	10.16.2020 17:48	10.16.2020 17:48	10.16.2020 17:48	10.16.2020 17:48	10.16.2020 17:48
	<i>Analyzed:</i>	10.16.2020 18:26	10.16.2020 18:49	10.16.2020 19:11	10.16.2020 20:31	10.16.2020 20:53	10.16.2020 21:16
	<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	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00403 0.00403	<0.00397 0.00397	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	10.16.2020 17:02	10.16.2020 17:02	10.16.2020 17:02	10.16.2020 17:02	10.16.2020 17:02	10.16.2020 17:02
	<i>Analyzed:</i>	10.17.2020 01:04	10.17.2020 01:23	10.17.2020 01:30	10.17.2020 01:37	10.17.2020 01:43	10.17.2020 02:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.94 9.94	140 10.0	64.2 9.98	346 9.96	387 9.94	417 9.98
TPH by SW8015 Mod	<i>Extracted:</i>	10.16.2020 17:30	10.16.2020 17:30	10.16.2020 17:30	10.16.2020 17:30	10.16.2020 17:30	10.16.2020 17:30
	<i>Analyzed:</i>	10.16.2020 21:28	10.16.2020 21:48	10.16.2020 22:09	10.16.2020 22:29	10.16.2020 23:10	10.16.2020 23:31
	<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	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total GRO-DRO		<49.9 49.9	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<49.9 49.9	<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 675400

LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri 10.16.2020 12:00

Report Date: 10.19.2020 14:41

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	675400-007	675400-008				
	Field Id:	BH08 F	BH08 G				
	Depth:	33- ft	36- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	10.16.2020 09:40	10.16.2020 09:50				
BTEX by EPA 8021B	Extracted:	10.16.2020 17:48	10.16.2020 17:48				
	Analyzed:	10.16.2020 21:38	10.16.2020 22:01				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00199 0.00199	<0.00200 0.00200				
Toluene		<0.00199 0.00199	<0.00200 0.00200				
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200				
m,p-Xylenes		<0.00398 0.00398	<0.00400 0.00400				
o-Xylene		<0.00199 0.00199	<0.00200 0.00200				
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200				
Total BTEX		<0.00199 0.00199	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	10.16.2020 17:02	10.16.2020 17:02				
	Analyzed:	10.17.2020 02:09	10.17.2020 02:16				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		220 9.98	181 9.94				
TPH by SW8015 Mod	Extracted:	10.16.2020 17:30	10.16.2020 17:30				
	Analyzed:	10.16.2020 23:52	10.17.2020 00:12				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8				
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8				
Total GRO-DRO		<49.9 49.9	<49.8 49.8				
Total TPH		<49.9 49.9	<49.8 49.8				

BRL - Below Reporting Limit

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





Analytical Report 675400

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

012920017

10.19.2020

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)



10.19.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **675400**

ADU Hondo Tester

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) 675400. 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. 675400 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 675400****LT Environmental, Inc., Arvada, CO**

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH08	S	10.16.2020 08:40	1 ft	675400-001
BH08 A	S	10.16.2020 08:50	6 ft	675400-002
BH08 B	S	10.16.2020 09:00	12 ft	675400-003
BH08 C	S	10.16.2020 09:10	20 ft	675400-004
BH08 D	S	10.16.2020 09:30	24 ft	675400-005
BH08 E	S	10.16.2020 09:35	30 ft	675400-006
BH08 F	S	10.16.2020 09:40	33 ft	675400-007
BH08 G	S	10.16.2020 09:50	36 ft	675400-008



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: 012920017
Work Order Number(s): 675400

Report Date: 10.19.2020
Date Received: 10.16.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-001 Date Collected: 10.16.2020 08:40 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	10.17.2020 01:04	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.16.2020 21:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.16.2020 21:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.16.2020 21:28	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.16.2020 21:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.16.2020 21:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.16.2020 21:28	
o-Terphenyl	84-15-1	92	%	70-135	10.16.2020 21:28	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08**
Lab Sample Id: 675400-001

Matrix: Soil
Date Collected: 10.16.2020 08:40

Date Received: 10.16.2020 12:00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.16.2020 18:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.16.2020 18:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.16.2020 18:26		
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.16.2020 18:26		



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 A** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-002 Date Collected: 10.16.2020 08:50 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	140	10.0	mg/kg	10.17.2020 01:23		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	10.16.2020 21:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	10.16.2020 21:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	10.16.2020 21:48	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	10.16.2020 21:48	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	10.16.2020 21:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	10.16.2020 21:48	
o-Terphenyl	84-15-1	93	%	70-135	10.16.2020 21:48	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 A**
Lab Sample Id: 675400-002

Matrix: Soil
Date Collected: 10.16.2020 08:50

Date Received: 10.16.2020 12:00
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.16.2020 18:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.16.2020 18:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.16.2020 18:49		
1,4-Difluorobenzene	540-36-3	102	%	70-130	10.16.2020 18:49		



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 B** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-003 Date Collected: 10.16.2020 09:00 Sample Depth: 12 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	64.2	9.98	mg/kg	10.17.2020 01:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.16.2020 22:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.16.2020 22:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.16.2020 22:09	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.16.2020 22:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.16.2020 22:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.16.2020 22:09	
o-Terphenyl	84-15-1	95	%	70-135	10.16.2020 22:09	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 B**
Lab Sample Id: 675400-003

Matrix: Soil
Date Collected: 10.16.2020 09:00

Date Received: 10.16.2020 12:00
Sample Depth: 12 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.16.2020 19:11	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.16.2020 19:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.16.2020 19:11		
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.16.2020 19:11		



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 C** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-004 Date Collected: 10.16.2020 09:10 Sample Depth: 20 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	346	9.96	mg/kg	10.17.2020 01:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.16.2020 22:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.16.2020 22:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.16.2020 22:29	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.16.2020 22:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.16.2020 22:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.16.2020 22:29	
o-Terphenyl	84-15-1	98	%	70-135	10.16.2020 22:29	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 C**
Lab Sample Id: 675400-004

Matrix: Soil
Date Collected: 10.16.2020 09:10

Date Received: 10.16.2020 12:00
Sample Depth: 20 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.16.2020 20:31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.16.2020 20:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.16.2020 20:31	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.16.2020 20:31	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 D** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-005 Date Collected: 10.16.2020 09:30 Sample Depth: 24 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	387	9.94	mg/kg	10.17.2020 01:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.16.2020 23:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.16.2020 23:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.16.2020 23:10	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.16.2020 23:10	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.16.2020 23:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.16.2020 23:10	
o-Terphenyl	84-15-1	101	%	70-135	10.16.2020 23:10	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 D**
Lab Sample Id: 675400-005

Matrix: Soil
Date Collected: 10.16.2020 09:30

Date Received: 10.16.2020 12:00
Sample Depth: 24 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.16.2020 20:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.16.2020 20:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.16.2020 20:53		
1,4-Difluorobenzene	540-36-3	105	%	70-130	10.16.2020 20:53		



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 E** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-006 Date Collected: 10.16.2020 09:35 Sample Depth: 30 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	417	9.98	mg/kg	10.17.2020 02:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.16.2020 23:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.16.2020 23:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.16.2020 23:31	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	10.16.2020 23:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.16.2020 23:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.16.2020 23:31	
o-Terphenyl	84-15-1	100	%	70-135	10.16.2020 23:31	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 E**
Lab Sample Id: 675400-006

Matrix: Soil
Date Collected: 10.16.2020 09:35

Date Received: 10.16.2020 12:00
Sample Depth: 30 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.16.2020 21:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.16.2020 21:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.16.2020 21:16	
1,4-Difluorobenzene	540-36-3	104	%	70-130	10.16.2020 21:16	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 F** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-007 Date Collected: 10.16.2020 09:40 Sample Depth: 33 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	220	9.98	mg/kg	10.17.2020 02:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.16.2020 23:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.16.2020 23:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.16.2020 23:52	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	10.16.2020 23:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.16.2020 23:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	10.16.2020 23:52	
o-Terphenyl	84-15-1	99	%	70-135	10.16.2020 23:52	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 F**
Lab Sample Id: 675400-007

Matrix: Soil
Date Collected: 10.16.2020 09:40

Date Received: 10.16.2020 12:00
Sample Depth: 33 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.16.2020 21:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.16.2020 21:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.16.2020 21:38		
1,4-Difluorobenzene	540-36-3	107	%	70-130	10.16.2020 21:38		



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 G** Matrix: Soil Date Received: 10.16.2020 12:00
 Lab Sample Id: 675400-008 Date Collected: 10.16.2020 09:50 Sample Depth: 36 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 10.16.2020 17:02 % Moisture:
 Seq Number: 3139977 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	9.94	mg/kg	10.17.2020 02:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH
 Analyst: DTH Date Prep: 10.16.2020 17:30 % Moisture:
 Seq Number: 3139959 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.17.2020 00:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.17.2020 00:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.17.2020 00:12	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	10.17.2020 00:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.17.2020 00:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.17.2020 00:12	
o-Terphenyl	84-15-1	101	%	70-135	10.17.2020 00:12	



Certificate of Analytical Results 675400

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH08 G**
Lab Sample Id: 675400-008

Matrix: Soil
Date Collected: 10.16.2020 09:50

Date Received: 10.16.2020 12:00
Sample Depth: 36 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 10.16.2020 17:48

% Moisture:
Basis: Wet Weight

Seq Number: 3139968

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.16.2020 22:01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.16.2020 22:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	10.16.2020 22:01	
4-Bromofluorobenzene	460-00-4	121	%	70-130	10.16.2020 22:01	



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.
ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3139977

MB Sample Id: 7713427-1-BLK

Matrix: Solid

LCS Sample Id: 7713427-1-BKS

Prep Method: E300P

Date Prep: 10.16.2020

LCSD Sample Id: 7713427-1-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	259	104	258	103	90-110	0	20	mg/kg	10.17.2020 00:51	

Analytical Method: Chloride by EPA 300

Seq Number: 3139977

Parent Sample Id: 675400-001

Matrix: Soil

MS Sample Id: 675400-001 S

Prep Method: E300P

Date Prep: 10.16.2020

MSD Sample Id: 675400-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	201	101	198	99	90-110	2	20	mg/kg	10.17.2020 01:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3139977

Parent Sample Id: 675416-003

Matrix: Soil

MS Sample Id: 675416-003 S

Prep Method: E300P

Date Prep: 10.16.2020

MSD Sample Id: 675416-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16400	200	16600	100	16600	100	90-110	0	20	mg/kg	10.17.2020 02:42	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139959

MB Sample Id: 7713463-1-BLK

Matrix: Solid

LCS Sample Id: 7713463-1-BKS

Prep Method: SW8015P

Date Prep: 10.16.2020

LCSD Sample Id: 7713463-1-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	960	96	988	99	70-135	3	35	mg/kg	10.16.2020 10:10	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1070	107	70-135	1	35	mg/kg	10.16.2020 10:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		118		116		70-135	%	10.16.2020 10:10
o-Terphenyl	100		105		104		70-135	%	10.16.2020 10:10

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139959

Matrix: Solid

MB Sample Id: 7713463-1-BLK

Prep Method: SW8015P

Date Prep: 10.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.16.2020 09:50	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3139959

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.16.2020

Parent Sample Id: 675356-009

MS Sample Id: 675356-009 S

MSD Sample Id: 675356-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1080	108	1050	105	70-135	3	35	mg/kg	10.16.2020 19:04	
Diesel Range Organics (DRO)	<49.9	998	1180	118	1140	114	70-135	3	35	mg/kg	10.16.2020 19:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	133		130		70-135	%	10.16.2020 19:04
o-Terphenyl	114		114		70-135	%	10.16.2020 19:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139968

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.16.2020

MB Sample Id: 7713419-1-BLK

LCS Sample Id: 7713419-1-BKS

LCSD Sample Id: 7713419-1-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	0.103	103	70-130	2	35	mg/kg	10.16.2020 13:44	
Toluene	<0.00200	0.100	0.0959	96	0.0979	98	70-130	2	35	mg/kg	10.16.2020 13:44	
Ethylbenzene	<0.00200	0.100	0.0998	100	0.104	104	71-129	4	35	mg/kg	10.16.2020 13:44	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.211	106	70-135	3	35	mg/kg	10.16.2020 13:44	
o-Xylene	<0.00200	0.100	0.0984	98	0.101	101	71-133	3	35	mg/kg	10.16.2020 13:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		102		70-130	%	10.16.2020 13:44
4-Bromofluorobenzene	116		113		113		70-130	%	10.16.2020 13:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139968

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.16.2020

Parent Sample Id: 675356-001

MS Sample Id: 675356-001 S

MSD Sample Id: 675356-001 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	0.108	108	0.113	113	70-130	5	35	mg/kg	10.16.2020 14:29	
Toluene	<0.00200	0.0998	0.0998	100	0.106	106	70-130	6	35	mg/kg	10.16.2020 14:29	
Ethylbenzene	<0.00200	0.0998	0.106	106	0.112	112	71-129	6	35	mg/kg	10.16.2020 14:29	
m,p-Xylenes	<0.00399	0.200	0.214	107	0.230	116	70-135	7	35	mg/kg	10.16.2020 14:29	
o-Xylene	<0.00200	0.0998	0.106	106	0.112	112	71-133	6	35	mg/kg	10.16.2020 14:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		105		70-130	%	10.16.2020 14:29
4-Bromofluorobenzene	108		110		70-130	%	10.16.2020 14:29

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



Chain of Custody

Work Order No: 675460

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 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432 236 3849	Email:	dbellill@ltenv.com

Project Name:	ADU Upgrade Test	Turn Around	☒ Routine ☐ Rush
Project Number:	NU2003542379	Rush:	
P.O. Number:	012920017	Due Date:	
Sampler's Name:	Benjamin Beill		

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	1.4/1.2	Thermometer ID	TMM007		
Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	8		
Sample Custody Seals:	☒ Yes ☐ No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA	BTEX (EPA	Chloride (I											Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
BH08	S	10/16/20	0840	6' 1'	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

Relinquished by: (Signature) Received by: (Signature) Date/Time

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 10.16.2020 12.00.00 PM

Work Order #: 675400

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)?	1.2
#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: 10.16.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.16.2020

Certificate of Analysis Summary 678096



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: TE012920017

Date Received in Lab: Tue 11.17.2020 11:25

Contact: Dan Moir

Report Date: 11.20.2020 18:55

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	678096-001	678096-002	678096-003	678096-004	678096-005	678096-006
	<i>Field Id:</i>	BH03G	BH03H	BH03I	BH03J	BH03K	BH02G
	<i>Depth:</i>	40- ft	44- ft	48- ft	54- ft	57- ft	40- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	11.16.2020 10:00	11.16.2020 10:45	11.16.2020 11:30	11.16.2020 12:30	11.16.2020 13:00	11.16.2020 16:30
BTEX by EPA 8021B	<i>Extracted:</i>	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00
	<i>Analyzed:</i>	11.17.2020 18:58	11.17.2020 19:21	11.17.2020 19:43	11.17.2020 20:06	11.17.2020 20:28	11.17.2020 20:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00404 0.00404	<0.00396 0.00396	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00198 0.00198	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	11.17.2020 17:01	11.17.2020 17:01	11.17.2020 17:01	11.17.2020 17:01	11.17.2020 17:01	11.17.2020 17:01
	<i>Analyzed:</i>	11.18.2020 13:39	11.18.2020 13:44	11.18.2020 13:50	11.18.2020 13:56	11.18.2020 14:02	11.18.2020 14:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		570 10.1	342 9.94	900 49.7	532 49.7	436 49.8	1830 50.1
TPH by SW8015 Mod	<i>Extracted:</i>	*** ** *	*** ** *	*** ** *	*** ** *	11.17.2020 16:00	11.17.2020 16:00
	<i>Analyzed:</i>	11.17.2020 16:16	11.17.2020 16:57	11.17.2020 17:17	11.17.2020 17:37	*** ** *	*** ** *
	<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)		<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.0 50.0
Total GRO-DRO		<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 678096



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: TE012920017

Date Received in Lab: Tue 11.17.2020 11:25

Contact: Dan Moir

Report Date: 11.20.2020 18:55

Project Location:

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	678096-007	678096-008	678096-009	678096-010		
	<i>Field Id:</i>	BH02H	BH02I	BH02J	BH02K		
	<i>Depth:</i>	44- ft	48- ft	54- ft	57- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	11.16.2020 16:45	11.16.2020 17:00	11.17.2020 08:40	11.17.2020 09:00		
BTEX by EPA 8021B	<i>Extracted:</i>	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00	11.17.2020 14:00		
	<i>Analyzed:</i>	11.17.2020 21:13	11.17.2020 21:35	11.17.2020 22:53	11.17.2020 23:15		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
m,p-Xylenes		<0.00401 0.00401	<0.00397 0.00397	<0.00402 0.00402	<0.00404 0.00404		
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00202 0.00202		
Chloride by EPA 300	<i>Extracted:</i>	11.17.2020 17:01	11.17.2020 15:52	11.17.2020 15:52	11.17.2020 15:52		
	<i>Analyzed:</i>	11.18.2020 14:14	11.18.2020 14:50	11.18.2020 15:08	11.18.2020 16:15		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		1290 50.5	1920 49.9	2600 50.1	928 10.0		
TPH by SW8015 Mod	<i>Extracted:</i>	11.17.2020 16:00	11.17.2020 16:00	11.17.2020 16:00	11.17.2020 16:00		
	<i>Analyzed:</i>	11.17.2020 16:16	11.17.2020 16:57	11.17.2020 17:17	11.17.2020 17:37		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.1 50.1	<50.0 50.0	<49.8 49.8		
Diesel Range Organics (DRO)		<50.2 50.2	<50.1 50.1	<50.0 50.0	<49.8 49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.1 50.1	<50.0 50.0	<49.8 49.8		
Total GRO-DRO		<50.2 50.2	<50.1 50.1	<50.0 50.0	<49.8 49.8		
Total TPH		<50.2 50.2	<50.1 50.1	<50.0 50.0	<49.8 49.8		

BRL - Below Reporting Limit

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



Analytical Report 678096

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

TE012920017

11.20.2020

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)



11.20.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **678096**

ADU Hondo Tester

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) 678096. 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. 678096 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 678096****LT Environmental, Inc., Arvada, CO**

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03G	S	11.16.2020 10:00	40 ft	678096-001
BH03H	S	11.16.2020 10:45	44 ft	678096-002
BH03I	S	11.16.2020 11:30	48 ft	678096-003
BH03J	S	11.16.2020 12:30	54 ft	678096-004
BH03K	S	11.16.2020 13:00	57 ft	678096-005
BH02G	S	11.16.2020 16:30	40 ft	678096-006
BH02H	S	11.16.2020 16:45	44 ft	678096-007
BH02I	S	11.16.2020 17:00	48 ft	678096-008
BH02J	S	11.17.2020 08:40	54 ft	678096-009
BH02K	S	11.17.2020 09:00	57 ft	678096-010



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: TE012920017
Work Order Number(s): 678096

Report Date: 11.20.2020
Date Received: 11.17.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03G** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-001 Date Collected: 11.16.2020 10:00 Sample Depth: 40 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	570	10.1	mg/kg	11.18.2020 13:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 10:00 % Moisture:
 Seq Number: 3142566 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.17.2020 16:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.17.2020 16:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.17.2020 16:16	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.17.2020 16:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.17.2020 16:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	11.17.2020 16:16	
o-Terphenyl	84-15-1	106	%	70-135	11.17.2020 16:16	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03G**
Lab Sample Id: 678096-001

Matrix: Soil
Date Collected: 11.16.2020 10:00

Date Received: 11.17.2020 11:25
Sample Depth: 40 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.17.2020 18:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.17.2020 18:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.17.2020 18:58	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.2020 18:58	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03H** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-002 Date Collected: 11.16.2020 10:45 Sample Depth: 44 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	342	9.94	mg/kg	11.18.2020 13:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 10:00 % Moisture:
 Seq Number: 3142566 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.17.2020 16:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.17.2020 16:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.17.2020 16:57	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.17.2020 16:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.17.2020 16:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	11.17.2020 16:57	
o-Terphenyl	84-15-1	118	%	70-135	11.17.2020 16:57	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03H**
Lab Sample Id: 678096-002

Matrix: Soil
Date Collected: 11.16.2020 10:45

Date Received: 11.17.2020 11:25
Sample Depth: 44 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.17.2020 19:21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.17.2020 19:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.17.2020 19:21	
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.17.2020 19:21	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03I** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-003 Date Collected: 11.16.2020 11:30 Sample Depth: 48 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	900	49.7	mg/kg	11.18.2020 13:50		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 10:00 % Moisture:
 Seq Number: 3142566 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.17.2020 17:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.17.2020 17:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.17.2020 17:17	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.17.2020 17:17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.17.2020 17:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.17.2020 17:17	
o-Terphenyl	84-15-1	118	%	70-135	11.17.2020 17:17	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03I**
Lab Sample Id: 678096-003

Matrix: Soil
Date Collected: 11.16.2020 11:30

Date Received: 11.17.2020 11:25
Sample Depth: 48 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.17.2020 19:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.17.2020 19:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.17.2020 19:43	
4-Bromofluorobenzene	460-00-4	89	%	70-130	11.17.2020 19:43	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03J** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-004 Date Collected: 11.16.2020 12:30 Sample Depth: 54 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	532	49.7	mg/kg	11.18.2020 13:56		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 10:00 % Moisture:
 Seq Number: 3142566 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.17.2020 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.17.2020 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.17.2020 17:37	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.17.2020 17:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.17.2020 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.17.2020 17:37	
o-Terphenyl	84-15-1	106	%	70-135	11.17.2020 17:37	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03J**
Lab Sample Id: 678096-004

Matrix: Soil
Date Collected: 11.16.2020 12:30

Date Received: 11.17.2020 11:25
Sample Depth: 54 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.17.2020 20:06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.17.2020 20:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.17.2020 20:06	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.2020 20:06	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03K** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-005 Date Collected: 11.16.2020 13:00 Sample Depth: 57 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	436	49.8	mg/kg	11.18.2020 14:02		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.17.2020 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.17.2020 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.17.2020 15:36	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.17.2020 15:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.17.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.17.2020 15:36	
o-Terphenyl	84-15-1	120	%	70-135	11.17.2020 15:36	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03K**
Lab Sample Id: 678096-005

Matrix: Soil
Date Collected: 11.16.2020 13:00

Date Received: 11.17.2020 11:25
Sample Depth: 57 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	11.17.2020 20:28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.17.2020 20:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.17.2020 20:28	
4-Bromofluorobenzene	460-00-4	92	%	70-130	11.17.2020 20:28	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02G** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-006 Date Collected: 11.16.2020 16:30 Sample Depth: 40 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1830	50.1	mg/kg	11.18.2020 14:08		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.17.2020 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.17.2020 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.17.2020 15:56	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.17.2020 15:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.17.2020 15:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	11.17.2020 15:56	
o-Terphenyl	84-15-1	116	%	70-135	11.17.2020 15:56	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02G**
Lab Sample Id: 678096-006

Matrix: Soil
Date Collected: 11.16.2020 16:30

Date Received: 11.17.2020 11:25
Sample Depth: 40 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.17.2020 20:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.17.2020 20:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.2020 20:50		
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.17.2020 20:50		



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02H** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-007 Date Collected: 11.16.2020 16:45 Sample Depth: 44 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1290	50.5	mg/kg	11.18.2020 14:14		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.17.2020 16:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.17.2020 16:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.17.2020 16:16	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.17.2020 16:16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.17.2020 16:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.17.2020 16:16	
o-Terphenyl	84-15-1	108	%	70-135	11.17.2020 16:16	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02H**
Lab Sample Id: 678096-007

Matrix: Soil
Date Collected: 11.16.2020 16:45

Date Received: 11.17.2020 11:25
Sample Depth: 44 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.17.2020 21:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.17.2020 21:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.17.2020 21:13	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.2020 21:13	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02I** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-008 Date Collected: 11.16.2020 17:00 Sample Depth: 48 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 15:52 % Moisture:
 Seq Number: 3142697 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1920	49.9	mg/kg	11.18.2020 14:50		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.17.2020 16:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.17.2020 16:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.17.2020 16:57	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.17.2020 16:57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.17.2020 16:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	11.17.2020 16:57	
o-Terphenyl	84-15-1	116	%	70-135	11.17.2020 16:57	



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LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02I**
Lab Sample Id: 678096-008

Matrix: Soil
Date Collected: 11.16.2020 17:00

Date Received: 11.17.2020 11:25
Sample Depth: 48 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	11.17.2020 21:35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.17.2020 21:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	11.17.2020 21:35	
1,4-Difluorobenzene	540-36-3	103	%	70-130	11.17.2020 21:35	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02J** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-009 Date Collected: 11.17.2020 08:40 Sample Depth: 54 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 15:52 % Moisture:
 Seq Number: 3142697 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2600	50.1	mg/kg	11.18.2020 15:08		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.17.2020 17:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.17.2020 17:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.17.2020 17:17	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.17.2020 17:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.17.2020 17:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.17.2020 17:17	
o-Terphenyl	84-15-1	112	%	70-135	11.17.2020 17:17	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02J**
Lab Sample Id: 678096-009

Matrix: Soil
Date Collected: 11.17.2020 08:40

Date Received: 11.17.2020 11:25
Sample Depth: 54 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.17.2020 22:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.17.2020 22:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.17.2020 22:53	
4-Bromofluorobenzene	460-00-4	85	%	70-130	11.17.2020 22:53	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02K** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678096-010 Date Collected: 11.17.2020 09:00 Sample Depth: 57 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 15:52 % Moisture:
 Seq Number: 3142697 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	928	10.0	mg/kg	11.18.2020 16:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 16:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.17.2020 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.17.2020 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.17.2020 17:37	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.17.2020 17:37	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.17.2020 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.17.2020 17:37	
o-Terphenyl	84-15-1	106	%	70-135	11.17.2020 17:37	



Certificate of Analytical Results 678096

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02K**
Lab Sample Id: 678096-010

Matrix: Soil
Date Collected: 11.17.2020 09:00

Date Received: 11.17.2020 11:25
Sample Depth: 57 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.17.2020 23:15	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.17.2020 23:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.17.2020 23:15	
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.17.2020 23:15	



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.
ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3142697

MB Sample Id: 7715393-1-BLK

Matrix: Solid

LCS Sample Id: 7715393-1-BKS

Prep Method: E300P

Date Prep: 11.17.2020

LCSD Sample Id: 7715393-1-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	300	279	93	277	92	90-110	1	20	mg/kg	11.18.2020 14:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

MB Sample Id: 7715379-1-BLK

Matrix: Solid

LCS Sample Id: 7715379-1-BKS

Prep Method: E300P

Date Prep: 11.17.2020

LCSD Sample Id: 7715379-1-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	11.18.2020 11:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3142697

Parent Sample Id: 677780-023

Matrix: Soil

MS Sample Id: 677780-023 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 677780-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	28.4	198	247	110	247	110	90-110	0	20	mg/kg	11.18.2020 17:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3142697

Parent Sample Id: 678096-008

Matrix: Soil

MS Sample Id: 678096-008 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 678096-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1920	199	2130	106	2120	101	90-110	0	20	mg/kg	11.18.2020 14:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

Parent Sample Id: 677486-009

Matrix: Soil

MS Sample Id: 677486-009 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 677486-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9330	202	9530	99	9510	90	90-110	0	20	mg/kg	11.18.2020 11:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

Parent Sample Id: 677769-068

Matrix: Soil

MS Sample Id: 677769-068 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 677769-068 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4440	202	4640	99	4660	108	90-110	0	20	mg/kg	11.18.2020 13:03	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142566

MB Sample Id: 7715396-1-BLK

Matrix: Solid

LCS Sample Id: 7715396-1-BKS

Prep Method: SW8015P

Date Prep: 11.17.2020

LCSD Sample Id: 7715396-1-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	1160	116	1170	117	70-135	1	35	mg/kg	11.17.2020 11:28	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1050	105	70-135	3	35	mg/kg	11.17.2020 11:28	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane	118		119		113		70-135			%	11.17.2020 11:28	
o-Terphenyl	117		123		109		70-135			%	11.17.2020 11:28	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

MB Sample Id: 7715398-1-BLK

Matrix: Solid

LCS Sample Id: 7715398-1-BKS

Prep Method: SW8015P

Date Prep: 11.17.2020

LCSD Sample Id: 7715398-1-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	966	97	70-135	1	35	mg/kg	11.17.2020 11:28	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1070	107	70-135	0	35	mg/kg	11.17.2020 11:28	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane	105		133		133		70-135			%	11.17.2020 11:28	
o-Terphenyl	105		102		102		70-135			%	11.17.2020 11:28	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142566

Matrix: Solid

MB Sample Id: 7715396-1-BLK

Prep Method: SW8015P

Date Prep: 11.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.17.2020 11:08	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

Matrix: Solid

MB Sample Id: 7715398-1-BLK

Prep Method: SW8015P

Date Prep: 11.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.17.2020 11:08	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142566

Parent Sample Id: 677883-023

Matrix: Soil

MS Sample Id: 677883-023 S

Prep Method: SW8015P

Date Prep: 11.17.2020

MSD Sample Id: 677883-023 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	1060	106	1130	113	70-135	6	35	mg/kg	11.17.2020 12:28	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1020	102	70-135	1	35	mg/kg	11.17.2020 12:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		112		70-135	%	11.17.2020 12:28
o-Terphenyl	114		114		70-135	%	11.17.2020 12:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

Parent Sample Id: 677883-028

Matrix: Soil

MS Sample Id: 677883-028 S

Prep Method: SW8015P

Date Prep: 11.17.2020

MSD Sample Id: 677883-028 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)	<50.3	1010	1080	107	1120	112	70-135	4	35	mg/kg	11.17.2020 12:28	
Diesel Range Organics (DRO)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.17.2020 12:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		107		70-135	%	11.17.2020 12:28
o-Terphenyl	104		116		70-135	%	11.17.2020 12:28

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142570

MB Sample Id: 7715389-1-BLK

Matrix: Solid

LCS Sample Id: 7715389-1-BKS

Prep Method: SW5035A

Date Prep: 11.17.2020

LCSD Sample Id: 7715389-1-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	0.107	107	70-130	4	35	mg/kg	11.17.2020 16:11	
Toluene	<0.00200	0.100	0.0997	100	0.103	103	70-130	3	35	mg/kg	11.17.2020 16:11	
Ethylbenzene	<0.00200	0.100	0.0931	93	0.0963	96	71-129	3	35	mg/kg	11.17.2020 16:11	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.195	98	70-135	3	35	mg/kg	11.17.2020 16:11	
o-Xylene	<0.00200	0.100	0.0935	94	0.0965	97	71-133	3	35	mg/kg	11.17.2020 16:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		99		70-130	%	11.17.2020 16:11
4-Bromofluorobenzene	91		86		84		70-130	%	11.17.2020 16:11

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.
ADU Hondo Tester

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142570

Parent Sample Id: 678092-001

Matrix: Soil

MS Sample Id: 678092-001 S

Prep Method: SW5035A

Date Prep: 11.17.2020

MSD Sample Id: 678092-001 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	0.0901	90	0.0968	97	70-130	7	35	mg/kg	11.17.2020 16:56	
Toluene	<0.00200	0.100	0.0876	88	0.0937	94	70-130	7	35	mg/kg	11.17.2020 16:56	
Ethylbenzene	<0.00200	0.100	0.0817	82	0.0880	88	71-129	7	35	mg/kg	11.17.2020 16:56	
m,p-Xylenes	<0.00401	0.200	0.166	83	0.178	89	70-135	7	35	mg/kg	11.17.2020 16:56	
o-Xylene	<0.00200	0.100	0.0812	81	0.0876	88	71-133	8	35	mg/kg	11.17.2020 16:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	11.17.2020 16:56
4-Bromofluorobenzene	90		86		70-130	%	11.17.2020 16:56

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



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

Work Order No: 678096

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Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	<i>Kyle D. Howell</i>
Company Name:	LT Environmental, Inc., Permian office	Company Name:	<i>XTO Energy Inc.</i>
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	<i>bbeilill@ltenv.com</i>

Work Order Comments

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐

State of Project:

Reporting Level: ☐ Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐

Deliverables: ☐ EDD ☐ ADAPT ☐ Other:

ANALYSIS REQUEST										Work Order Notes
Project Name:	Turn Around									
Project Number:	Routine ☒									
P.O. Number:	Rush:									
Sampler's Name:	Due Date:									
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No			
Temperature (°C):		1.8 / 1.6			Thermometer ID					
Received Intact:		Yes	No	Correction Factor:		-0.2				
Cooler Custody Seals:		Yes	No	Total Containers:		10				
Sample Custody Seals:		Yes	No							
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)		
BH03G	S	11/16/20	1600	40'	1	✓	✓	✓		
BH03H		10/15	1045	44'						
BH03I		11/30	1130	48'						
BH03J		12/30	1230	54'						
BH03K		13/00	1300	57'						
BH03L		16/30	1630	40'						
BH02H		16/45	1645	44'						
BH02I		17/00	1700	48'						
BH02J		11/17/20	0840	54'		✓	✓	✓		
BH02K		11/17/20	0900	57'		✓	✓	✓		

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

Sample Comments

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>Carla D. Howell</i>	11-17-20 1125			

Revised Date 05/14/18 Rev. 2018.1

Certificate of Analysis Summary 678092



LT Environmental, Inc., Arvada, CO

Project Name: ADU Hondo Tester

Project Id: TE 012920017

Contact: Dan Moir

Project Location:

Date Received in Lab: Tue 11.17.2020 11:25

Report Date: 11.19.2020 09:16

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	678092-001	678092-002				
	Field Id:	BH03L	BH02L				
	Depth:	61- ft	61- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	11.16.2020 13:45	11.17.2020 09:20				
BTEX by EPA 8021B	Extracted:	11.17.2020 14:00	11.17.2020 14:00				
	Analyzed:	11.17.2020 18:14	11.17.2020 18:36				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00201 0.00201	<0.00201 0.00201				
	Toluene	<0.00201 0.00201	<0.00201 0.00201				
	Ethylbenzene	<0.00201 0.00201	<0.00201 0.00201				
	m,p-Xylenes	<0.00402 0.00402	<0.00402 0.00402				
	o-Xylene	<0.00201 0.00201	<0.00201 0.00201				
	Total Xylenes	<0.00201 0.00201	<0.00201 0.00201				
	Total BTEX	<0.00201 0.00201	<0.00201 0.00201				
Chloride by EPA 300	Extracted:	11.17.2020 17:01	11.17.2020 17:01				
	Analyzed:	11.18.2020 13:15	11.18.2020 13:21				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	201 50.3	362 9.90				
TPH by SW8015 Mod	Extracted:	11.17.2020 12:00	11.17.2020 12:00				
	Analyzed:	11.17.2020 14:29	11.17.2020 14:49				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<49.9 49.9	<50.1 50.1				
	Diesel Range Organics (DRO)	<49.9 49.9	<50.1 50.1				
	Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9	<50.1 50.1				
	Total GRO-DRO	<49.9 49.9	<50.1 50.1				
	Total TPH	<49.9 49.9	<50.1 50.1				

BRL - Below Reporting Limit

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



Analytical Report 678092

for

LT Environmental, Inc.

Project Manager: Dan Moir

ADU Hondo Tester

TE 012920017

11.19.2020

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)



11.19.2020

Project Manager: **Dan Moir**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **678092**

ADU Hondo Tester

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) 678092. 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. 678092 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 678092

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH03L	S	11.16.2020 13:45	61 ft	678092-001
BH02L	S	11.17.2020 09:20	61 ft	678092-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: ADU Hondo Tester

Project ID: TE 012920017
Work Order Number(s): 678092

Report Date: 11.19.2020
Date Received: 11.17.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 678092

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03L** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678092-001 Date Collected: 11.16.2020 13:45 Sample Depth: 61 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	201	50.3	mg/kg	11.18.2020 13:15		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 12:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	11.17.2020 14:29	
o-Terphenyl	84-15-1	98	%	70-135	11.17.2020 14:29	



Certificate of Analytical Results 678092

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH03L**
Lab Sample Id: 678092-001

Matrix: Soil
Date Collected: 11.16.2020 13:45

Date Received: 11.17.2020 11:25
Sample Depth: 61 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.17.2020 18:14	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.17.2020 18:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.17.2020 18:14	
4-Bromofluorobenzene	460-00-4	87	%	70-130	11.17.2020 18:14	



Certificate of Analytical Results 678092

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02L** Matrix: Soil Date Received: 11.17.2020 11:25
 Lab Sample Id: 678092-002 Date Collected: 11.17.2020 09:20 Sample Depth: 61 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 11.17.2020 17:01 % Moisture:
 Seq Number: 3142643 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	362	9.90	mg/kg	11.18.2020 13:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: MAB
 Analyst: CAC Date Prep: 11.17.2020 12:00 % Moisture:
 Seq Number: 3142569 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.17.2020 14:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.17.2020 14:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.17.2020 14:49	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.17.2020 14:49	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	11.17.2020 14:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	11.17.2020 14:49	
o-Terphenyl	84-15-1	118	%	70-135	11.17.2020 14:49	



Certificate of Analytical Results 678092

LT Environmental, Inc., Arvada, CO

ADU Hondo Tester

Sample Id: **BH02L**
Lab Sample Id: 678092-002

Matrix: Soil
Date Collected: 11.17.2020 09:20

Date Received: 11.17.2020 11:25
Sample Depth: 61 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.17.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142570

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.17.2020 18:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.17.2020 18:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	11.17.2020 18:36	
1,4-Difluorobenzene	540-36-3	104	%	70-130	11.17.2020 18:36	



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.
ADU Hondo Tester

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

MB Sample Id: 7715379-1-BLK

Matrix: Solid

LCS Sample Id: 7715379-1-BKS

Prep Method: E300P

Date Prep: 11.17.2020

LCSD Sample Id: 7715379-1-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	11.18.2020 11:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

Parent Sample Id: 677486-009

Matrix: Soil

MS Sample Id: 677486-009 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 677486-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9330	202	9530	99	9510	90	90-110	0	20	mg/kg	11.18.2020 11:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3142643

Parent Sample Id: 677769-068

Matrix: Soil

MS Sample Id: 677769-068 S

Prep Method: E300P

Date Prep: 11.17.2020

MSD Sample Id: 677769-068 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4440	202	4640	99	4660	108	90-110	0	20	mg/kg	11.18.2020 13:03	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

MB Sample Id: 7715398-1-BLK

Matrix: Solid

LCS Sample Id: 7715398-1-BKS

Prep Method: SW8015P

Date Prep: 11.17.2020

LCSD Sample Id: 7715398-1-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	966	97	70-135	1	35	mg/kg	11.17.2020 11:28	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1070	107	70-135	0	35	mg/kg	11.17.2020 11:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		133		133		70-135	%	11.17.2020 11:28
o-Terphenyl	105		102		102		70-135	%	11.17.2020 11:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

Matrix: Solid

MB Sample Id: 7715398-1-BLK

Prep Method: SW8015P

Date Prep: 11.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.17.2020 11:08	

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.
ADU Hondo Tester

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142569

Parent Sample Id: 677883-028

Matrix: Soil

MS Sample Id: 677883-028 S

Prep Method: SW8015P

Date Prep: 11.17.2020

MSD Sample Id: 677883-028 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)	<50.3	1010	1080	107	1120	112	70-135	4	35	mg/kg	11.17.2020 12:28	
Diesel Range Organics (DRO)	<50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.17.2020 12:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		107		70-135	%	11.17.2020 12:28
o-Terphenyl	104		116		70-135	%	11.17.2020 12:28

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142570

MB Sample Id: 7715389-1-BLK

Matrix: Solid

LCS Sample Id: 7715389-1-BKS

Prep Method: SW5035A

Date Prep: 11.17.2020

LCSD Sample Id: 7715389-1-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	0.107	107	70-130	4	35	mg/kg	11.17.2020 16:11	
Toluene	<0.00200	0.100	0.0997	100	0.103	103	70-130	3	35	mg/kg	11.17.2020 16:11	
Ethylbenzene	<0.00200	0.100	0.0931	93	0.0963	96	71-129	3	35	mg/kg	11.17.2020 16:11	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.195	98	70-135	3	35	mg/kg	11.17.2020 16:11	
o-Xylene	<0.00200	0.100	0.0935	94	0.0965	97	71-133	3	35	mg/kg	11.17.2020 16:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		99		70-130	%	11.17.2020 16:11
4-Bromofluorobenzene	91		86		84		70-130	%	11.17.2020 16:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142570

Parent Sample Id: 678092-001

Matrix: Soil

MS Sample Id: 678092-001 S

Prep Method: SW5035A

Date Prep: 11.17.2020

MSD Sample Id: 678092-001 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	0.0901	90	0.0968	97	70-130	7	35	mg/kg	11.17.2020 16:56	
Toluene	<0.00200	0.100	0.0876	88	0.0937	94	70-130	7	35	mg/kg	11.17.2020 16:56	
Ethylbenzene	<0.00200	0.100	0.0817	82	0.0880	88	71-129	7	35	mg/kg	11.17.2020 16:56	
m,p-Xylenes	<0.00401	0.200	0.166	83	0.178	89	70-135	7	35	mg/kg	11.17.2020 16:56	
o-Xylene	<0.00200	0.100	0.0812	81	0.0876	88	71-133	8	35	mg/kg	11.17.2020 16:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	11.17.2020 16:56
4-Bromofluorobenzene	90		86		70-130	%	11.17.2020 16:56

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

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)

Work Order No: 678092

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	
Company Name:	LT Environmental, Inc., Permian office	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	bbelill@ltenv.com

Project Name:	ADU Honda Tester	Turn Around	
Project Number:	TE012920017	Routine	☐
P.O. Number:	NW2003542379	Rush:	24HR
Sampler's Name:	Benjamin Belill	Due Date:	

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	1.3 / 1.6	Thermometer ID			
Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:	2		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
B4032	S	11/16/20	1345	61'
B4022	↓	11/17/20	0920	61'

ANALYSIS REQUEST																															
Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Al	Sb	As	Ba	Be	B	Cd	Ca	Co	Cu	Cr	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn
1	X	X	X																												
↓	X	X	X																												

SAMPLE COMMENTS	
Program: UST/PST ☐ PRP ☐ brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other: ☐	

Work Order Notes	
TAT starts the day received by the lab, if received by 4:30pm	
Sample Comments	
Run B402 M if this sample fails for chlorides (7600 ppm)	

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
1 <i>[Signature]</i>	Cbe Cuyto	11-17-2012 11:25			2
3					4
5					6

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 11.17.2020 11.25.00 AM

Work Order #: 678092

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)?	1.6
#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: 11.17.2020

Checklist reviewed by:

Date: 11.17.2020

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 13753

CONDITIONS OF APPROVAL

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707		OGRID: 5380	Action Number: 13753	Action Type: C-141
OCD Reviewer	Condition			
chensley	OCD approves XTO installation of a 20-mil impermeable liner with a composite sample conducted prior to installation.			