

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	NRM1927632000
District RP	1RP-5727
Facility ID	
Application ID	pRM1927632114

Release Notification

Responsible Party

Responsible Party	NGL Water Solutions Permian, LLC	OGRID	372338
Contact Name	Joe Vargo	Contact Telephone	406-868-9799 (cell)
Contact email	Joseph.Vargo@nglep.com	Incident # (assigned by OCD)	
Contact mailing address	3773 Cherry Creek North Drive, Denver, CO 80209		

Location of Release Source

Latitude 32.208049 Longitude -103.49742
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Striker 6 SWD #1	Site Type	Salt Water Disposal
Date Release Discovered	09/18/2019	API# (if applicable)	30-025-44291

Unit Letter	Section	Township	Range	County
D	20	24S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: NGL Water Solutions Permian, LLC)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 3696	Volume Recovered (bbls) 3690
	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

Lightening strike. Two storage tanks burned.
Flow line to facility melted.

State of New Mexico
Oil Conservation Division

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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? Total spill volume in excess of 25 bbls. However, all fluids from the tanks were contained within the containment. Only approximately 18 bbls of produced water and skim oil from the melted flowline were on the ground. Fluid from flowline was on the caliche pad of the facility.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Neel Duncan, agent for NGL Water Solutions Permian LLC, notified Rick Rickman, Hobbs OCD, by phone with voicemail the morning of 09/19/2019. Rick Rickman returned the call and spoke with Neel Duncan and a cknowledgeed notification of the spill.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Joe Vargo</u>	Title: <u>Director, Regulatory Affairs</u>
Signature: <u></u>	Date: <u>09/27/2019</u>
email: <u>Joseph.Vargo@nglep.com</u>	Telephone: <u>406-868-9799 (cell)</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>10/03/2019</u>

Incident ID	NRM1927632000
District RP	1RP-5727
Facility ID	
Application ID	pRM1927632114

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>51-100</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: <i>Each of the following items must be included in the report.</i> ☒ 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.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Joseph Vargo Title: Regulatory Manager

Signature: [Signature] Date: 8-27-20

email: joseph.vargo@nglp.com Telephone: 303-815-1010

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



LT Environmental, Inc.

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

August 20, 2020

District 1
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

**RE: Closure Request Addendum
Striker 6 SWD #1
Incident Number NRM1927632000
Lea County, New Mexico**

To Whom It May Concern:

LT Environmental, Inc. (LTE), on behalf of NGL Energy Partners, LP (NGL), presents the following Closure Request Addendum detailing site assessment and soil sampling activities related to a release located at the Striker 6 SWD #1 (Site) in Unit D, Section 20, Township 24 South, Range 34 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to confirm the presence or absence of impacts to soil following a release of produced water at the Site. Based on field observations, field screenings, and laboratory analytical results from the soil sampling activities, NGL is submitting this Closure Request Addendum and requesting no further action (NFA) for Incident Number NRM1927632000.

RELEASE BACKGROUND

On September 18, 2019, a lightning strike caused two storage tanks to burn and a flow line to melt. The damage to the tanks and flow line resulted in a release of 3,696 barrels (bbls) of produced water. A majority of the produced water was contained in the lined concrete containment surrounding the tanks, only 18 bbls of produced water reached the caliche pad of the facility. A hydrovac truck was dispatched and recovered 3,690 bbls of freestanding fluid in the containment and on the caliche pad. NGL reported the release to the New Mexico Oil Conservation Division (NMOCD) immediately via phone on September 19, 2019 and subsequently on a Release Notification and Corrective Action Form C-141 on September 27, 2019. NMOCD then issued Incident Number NRM1927632000.

Following removal of freestanding fluids via hydrovac truck, NGL scraped the caliche pad and placed the soil on a roll off pad prior to disposing at a licensed disposal facility. In addition, an inspection of the lined concrete containment was completed to assess for any damages to the liner. After the inspection, the liner was removed and the concrete pad was power washed before a new liner was installed. Photo documentation was conducted by NGL personnel during the inspection and after the installation and a photographic log is included in Attachment 1.

A Closure Request was submitted to NMOCD describing the remediation efforts on January 27, 2020. However, NMOCD denied the Closure Request and requested additional information and sampling prior to closure. The following details additional remediation activities completed by LTE on behalf of NGL.

SITE CHARACTERIZATION

LTE characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, 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 was initially estimated to be approximately 30 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well was New Mexico Office of the State Engineer (NMOSE) Well C02309, located approximately 8,038 feet southwest of the Site. Depth to groundwater at C02309 is 30 feet bgs with a total well depth of 60 feet bgs. However, in order to provide a more accurate and site specific groundwater determination, LTE drilled a soil boring, BH02, permitted by the NMOSE and given permit number C-4458, POD1 (C-4458) to the depth of 55 feet bgs. C-4458 is located approximately 100 feet north of the release extent and was drilled on August 3, 2020. On August 6, 2020, LTE returned to the Site to determine the presence or absence of groundwater and found C-4458 was dry from surface to 55 feet bgs. Therefore, depth to groundwater at the Site is determined to be between 51 feet and 100 feet bgs or greater. All referenced wells are depicted on Figure 1 and referenced well records are included in Attachment 2. Further discussion of the drilling activities for C-4458 is included in subsequent sections.

The closest continuously flowing water or significant watercourse to the Site is an emergent wetland located approximately 2,360 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not located in an unstable geological area, such as karst formations.

CLOSURE CRITERIA

Based on the initial results of the Site Characterization, specifically the depth to water for the closest known water well C02309 at approximately 30 feet bgs, initial remedial actions were driven by the following NMOCD Table 1 Closure Criteria (Closure Criteria):

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

Following the completion of soil boring C-4458 at the Site, LTE revised the Site Characterization and utilized the following Closure Criteria to assess the Site for closure:

- Benzene: 10 mg/kg;
- BTEX: 50 mg/kg;
- TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- TPH: 2,500 mg/kg; and
- Chloride: 10,000 mg/kg.

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On May 20, 2020, LTE personnel visited the Site to evaluate the release extent. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS). The majority of the release occurred within the lined containment, however, 18 barrels of produced water released onto the caliche pad area west and northwest of the lined containment. LTE personnel collected and field-screened preliminary soil assessment samples at four locations (SS01 through SS04) within the release extent. Locations of soil samples are presented on Figure 2. Photographic documentation was conducted during the visit to the Site and is included in Attachment 1.

The four preliminary soil samples were collected at a depth of 0.5 feet bgs. The soil samples were field-screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screenings indicated excavation was likely unwarranted, however, further delineation to determine the presence or absence of impact to soil at depth was scheduled.

On May 27, 2020, LTE personnel returned to the Site to oversee additional soil assessment activities. Eight potholes (PH01 through PH08) and one borehole (BH01) were advanced using a side shift backhoe loader and a hand auger, respectively, to a depth of 1 to 6 feet bgs within the release extent.

Soil from the delineation soil samples was field-screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Two discrete soil samples were collected from each pothole and borehole at depths ranging from 1 to 6 feet bgs. Discrete soil samples collected and submitted for laboratory analysis included the result of the highest field screening as well as the maximum depth of each pothole and borehole location. Field screening results and observations for each pothole and borehole were logged on lithologic/soil sampling logs, which are included in Attachment 3. The locations of delineation potholes (PH01 through PH08) and borehole (BH01) are presented on Figure 3. Soil from the discrete delineation samples was placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC)

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

ANALYTICAL RESULTS

Laboratory analytical results indicated benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in the discrete delineation soil samples of borehole BH01 collected at 2 and 6 feet bgs as well as in potholes PH01 through PH08 collected between 1 and 6 feet bgs. The laboratory analytical results are summarized in Table 1 and the laboratory analytical reports are provided in Attachment 4. Based on field screening results and laboratory analytical results, soil excavation was not warranted for the release area.

DRILLING ACTIVITIES

On August 3, 2020 LTE personnel returned to the Site to conduct an investigation of groundwater depth. Using a truck-mounted drilling rig, and by method of hollow stem auger, soil boring BH02, permitted as C-4458, was drilled to 55 feet bgs in order to confirm depth to groundwater at the Site. After the borehole was completed, LTE waited more than 72 hours for the borehole to equilibrate, then used a digital oil/water interface probe to measure the static groundwater level in C-4458 on August 6, 2020. The soil boring was dry and the presence of groundwater was not detected from surface to 55 feet bgs. After the absence of groundwater was confirmed, LTE personnel oversaw the proper abandonment of C-4458 utilizing hydrated bentonite chips from surface to 55 feet bgs. The approved drilling permit and the well record and log form (WR-20) of C-4458 are provided in Attachment 2. The form WR-20 has been submitted to the NMOSE.

CONCLUSIONS

Delineation soil samples PH01/PH01A through PH08/PH08A and BH01/BH01A were collected from within the release extent from depths ranging from 1 foot to 6 feet bgs to assess for the presence or absence of soil impacts as a result of the release on September 18, 2019. Laboratory analytical results for all soil samples indicated benzene, BTEX, TPH-GRO, TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Based on initial response efforts, soil sample laboratory analytical results compliant with the Closure Criteria, and local depth to groundwater determined to be greater than 55 feet bgs, no soil excavation was deemed warranted. As such, NGL requests NFA and respectfully requests closure of Incident Number NRM1927632000.

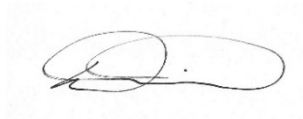
If you have any questions or comments, please do not hesitate to contact Mr. Dan Moir at (432) 236-3849.

Sincerely,

LT ENVIRONMENTAL, INC.



Benjamin Belill
Staff Geologist



Dan Moir, P.G.
Senior Geologist

cc: Mike Dinkel, NGL
Ted Peterson, NGL

Appendices:

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

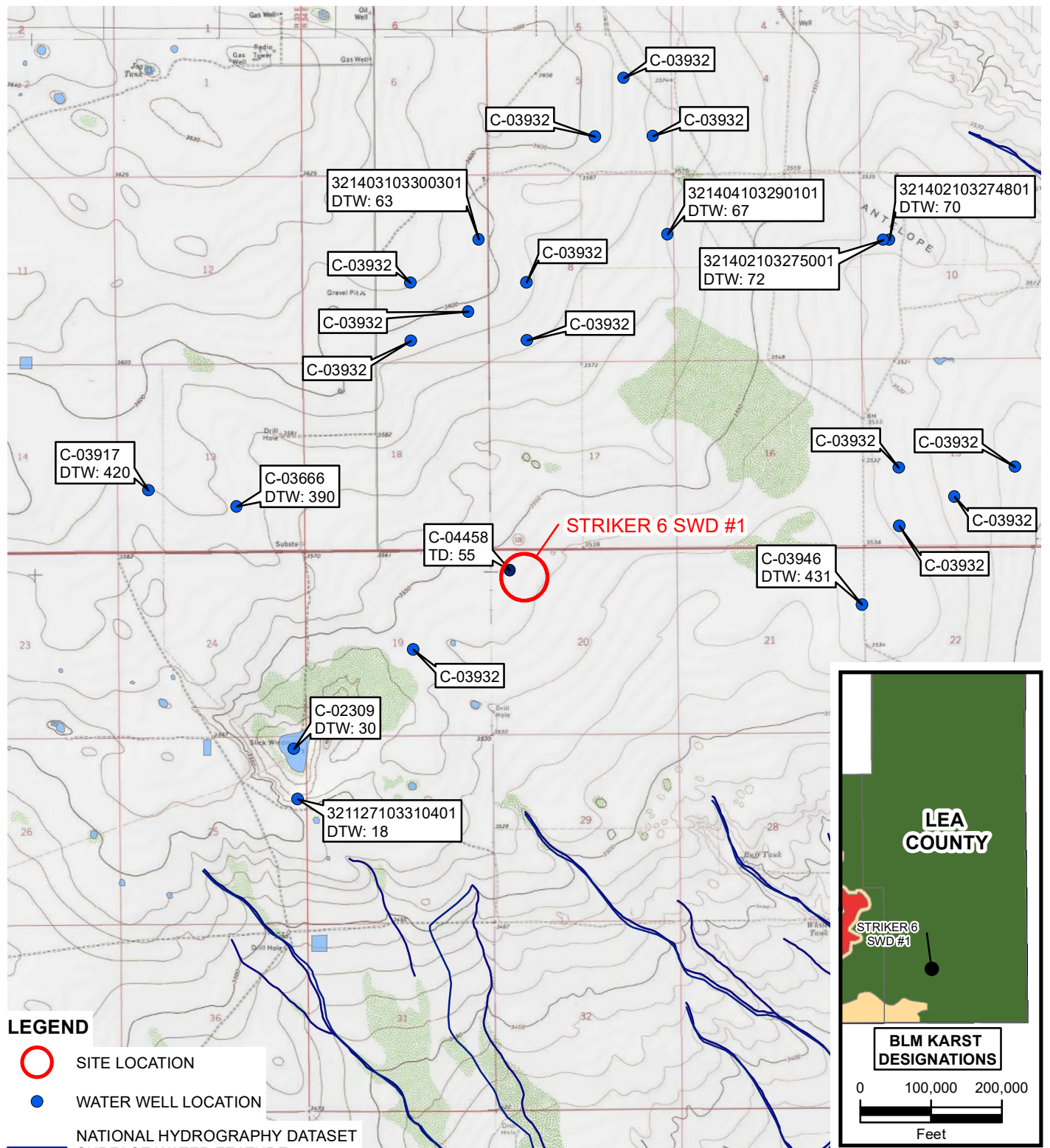


FIGURE 1
 SITE LOCATION MAP
 STRIKER 6 SWD #1
 UNIT D SEC 20 T24S R34E
 LEA COUNTY, NEW MEXICO
 NGL ENERGY PARTNERS, LP





LEGEND

IMAGE COURTESY OF ESRI



RELEASE LOCATION



PRELIMINARY SOIL SAMPLE



RELEASE EXTENT

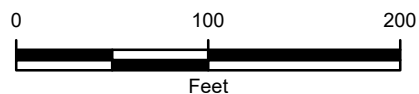


FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
STRIKER 6 SWD #1
UNIT D SEC 20 T24S R34E
LEA COUNTY, NEW MEXICO
NGL ENERGY PARTNERS, LP



NOTE: INCIDENT NUMBER NRM1927632000
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)



LEGEND

IMAGE COURTESY OF ESRI



RELEASE LOCATION



DELINEATION SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA



RELEASE EXTENT

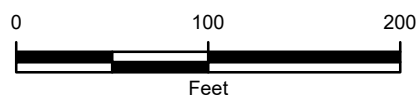


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
STRIKER 6 SWD #1
UNIT D SEC 20 T24S R34E
LEA COUNTY, NEW MEXICO
NGL ENERGY PARTNERS, LP



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of WSP

NOTE: INCIDENT NUMBER NRM1927632000
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

**TABLE 1
SOIL ANALYTICAL RESULTS**

**STRIKER 6 SWD #1
INCIDENT NUMBER NRM1927632000
LEA COUNTY, NEW MEXICO
NGL ENERGY PARTNERS, LP**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	10,000
PH01	4	05/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,810
PH01A	6	05/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	111
PH02	4	05/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,660
PH02A	6	05/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	249
PH03	2	05/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	1,000
PH03A	6	05/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	36.7
PH04	2	05/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	41.8
PH04A	4	05/27/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	99.8
PH05	2	05/27/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	1,250
PH05A	6	05/27/2020	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	73.5
PH06	1	05/27/2020	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	158
PH06A	4	05/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	32.2
PH07	1	05/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	162
PH07A	6	05/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	363
PH08	1	05/27/2020	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	1,400
PH08A	6	05/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	79.0
BH01	2	05/27/2020	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	34.8
BH01A	6	05/27/2020	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	15.3

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

ORO - motor oil range organics

NMAC - New Mexico Administrative Code

NMOCD - New Mexico Oil Conservation Division

NE - not established

TPH - total petroleum hydrocarbons

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018



PHOTOGRAPHIC LOG



Photograph 1: Damage to tanks and liner due to fire.



Photograph 2: Damage to tanks and liner due to fire.



Photograph 3: View of the liner after installation.



Photograph 4: View of the liner after installation.

PHOTOGRAPHIC LOG



Photograph 5: Northwest facing view of release extent.



Photograph 6: North facing view release extent.



Photograph 7: South facing view of borehole installation.



Photograph 8: Northeast facing view of backfilled borehole.



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-1 (BH02)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4458			
	WELL OWNER NAME(S) NGL Energy Partners, LP				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 3773 Cherry Creek N Drive Suite 1000				CITY Denver	STATE CO	ZIP 80209	
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 12	SECONDS 30.51	N		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84
		LONGITUDE -103		29	53.10	W		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW NW Sec. 20 T24S R34E								

2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 08/03/20		DRILLING ENDED 08/03/20		DEPTH OF COMPLETED WELL (FT) Temporary-Removed	BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	25	±6.5	Temporary well materials	Flush Thread 2 TPI	2.067	0.154	--
	25	55	±6.5	Temporary well materials	Flush Thread 2 TPI	2.067	0.154	.020

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0	55	±6.5	3/8 Bentonite Chips	±12	through HSA

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)		ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO						
	0	5		SAND, dry, brown-red, poorly graded, fine-very fine grain, trace off white caliche	Y	✓ N		
	5	9		CALICHE, dry, off white-light pink, moderately consolidated,	Y	✓ N		
	9	14		Thin (1-2mm) light brown very fine grain sand laminations.	Y	✓ N		
	14	29		Some sub-angular tan-light brown well consolidated gravel.	Y	✓ N		
	29	39		SANDSTONE, dry, tan-light brown, poorly graded, poorly cons.cobble and gravel	Y	✓ N		
	39	--		MUDSTONE, moist, dark brown-red, high plasticity, cohesive, unconsolidated-p	Y	✓ N		
	--	55		unconsolidated-poorly consolidated, trace thin (1mm) fine grain light grey sand	Y	✓ N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
					Y	N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00		

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: 08/03/2020 -Landed temporary well materials 08/05/2020-Removed well materials,abandoned boring using Bentonite Chips. Log adpated from LTE onsite geologist.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:		
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Jackie D. Atkins	08/17/20 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

2020-08-17_C-4458-POD1_OSE_Well Record and Log_Stricker-forsign

Final Audit Report

2020-08-17

Created:	2020-08-17
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAADuWplhoU-xc6zrVqpk3icz7YATWPbtR0

"2020-08-17_C-4458-POD1_OSE_Well Record and Log_Stricker-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2020-08-17 - 4:57:08 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2020-08-17 - 4:57:35 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2020-08-17 - 5:32:26 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2020-08-17 - 5:32:50 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Signed document emailed to Lucas Middleton (lucas@atkinseng.com) and Jack Atkins (jack@atkinseng.com)
2020-08-17 - 5:32:50 PM GMT

DESCRIPTION:

Latitude 32°11'27", Longitude 103°31'04" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,538 feet above NAVD88.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

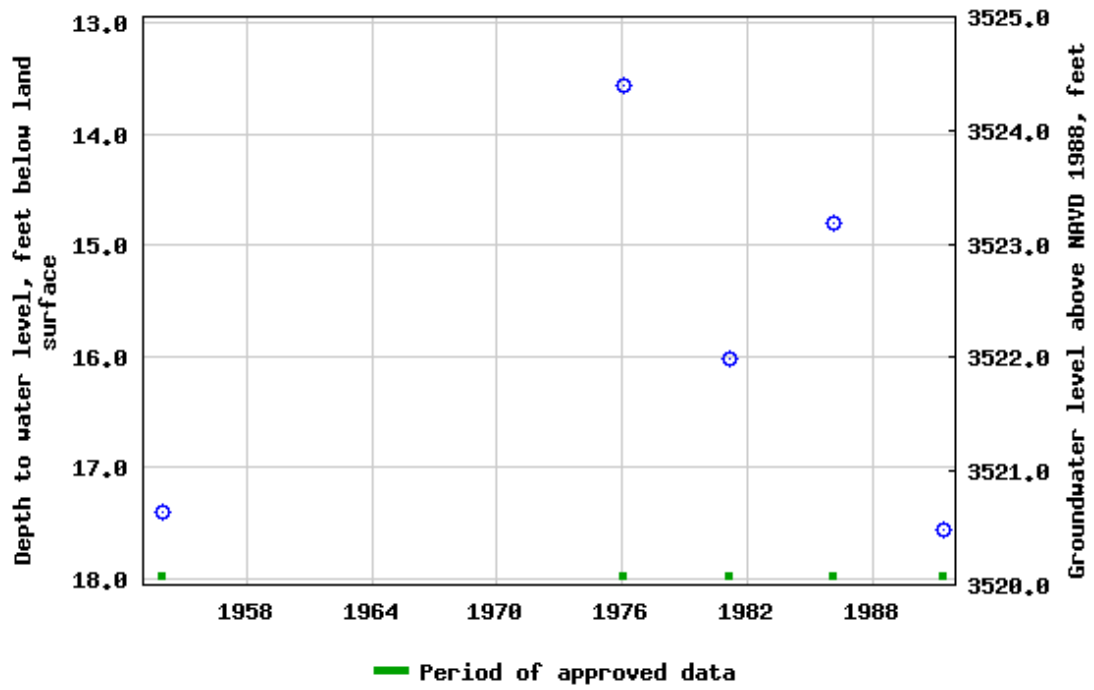
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1953-11-27	1991-05-29	5
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 321127103310401 24S,33E,24.44444



DESCRIPTION:

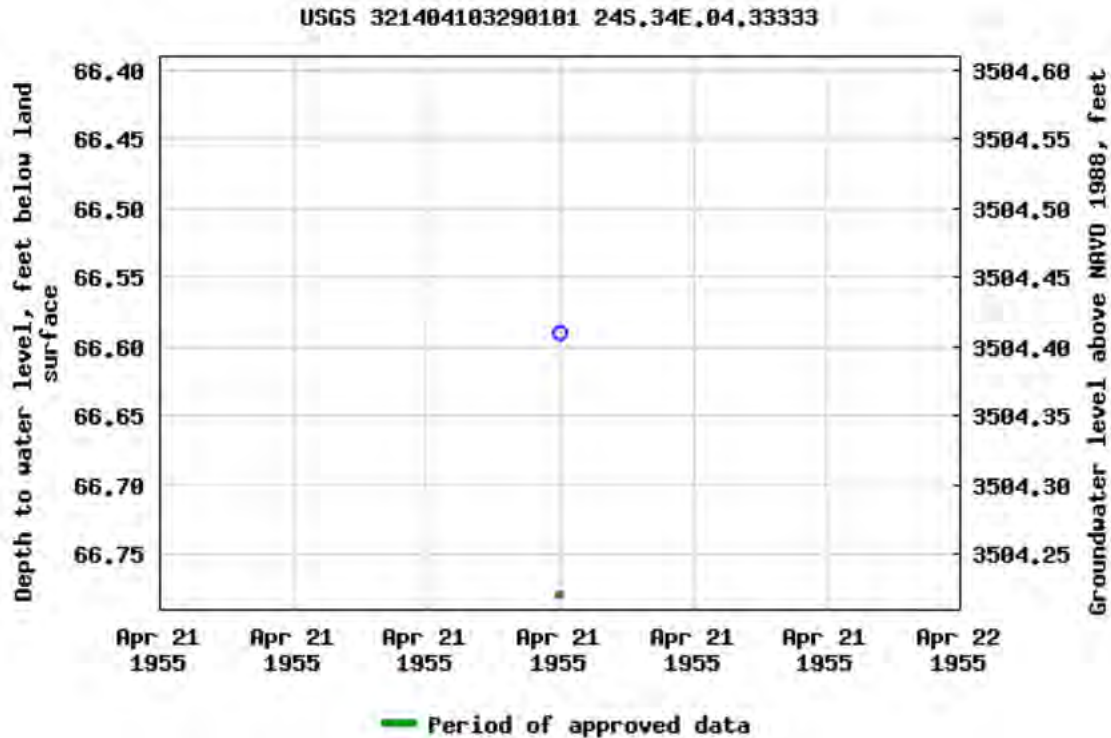
Latitude 32°14'04", Longitude 103°29'01" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,571 feet above NAVD88.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1955-04-21	1955-04-21	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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



DESCRIPTION:

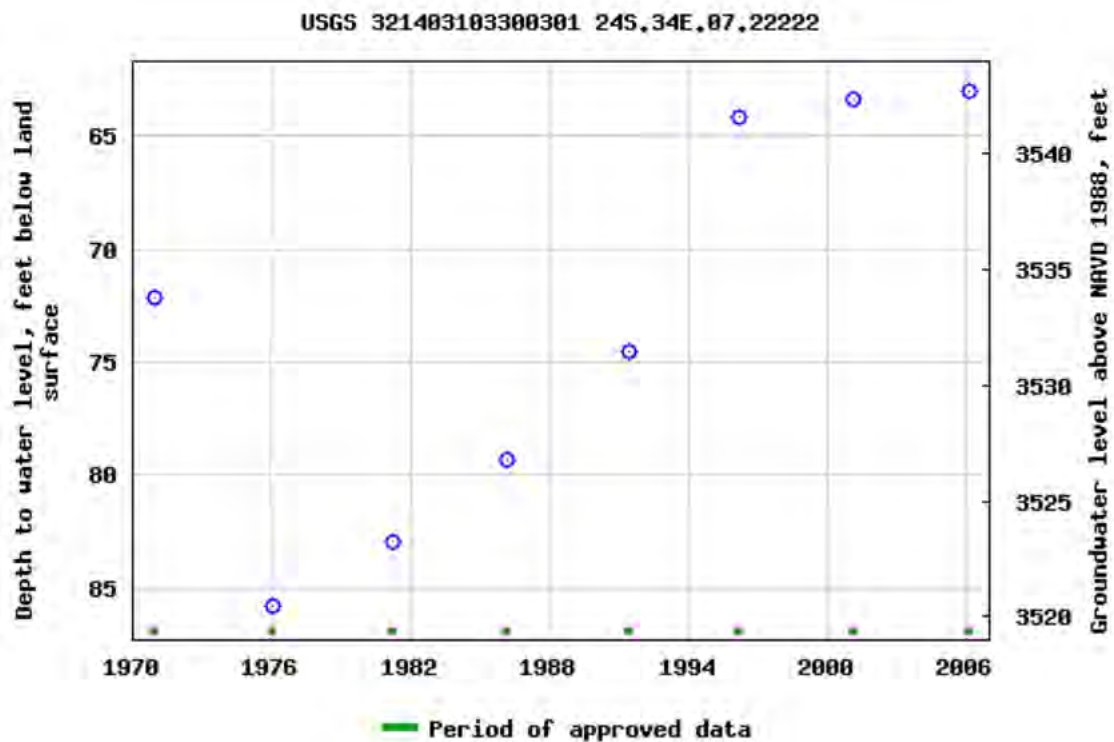
Latitude 32°14'03", Longitude 103°30'03" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,606 feet above NAVD88.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1970-12-08	2006-02-07	8
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](#)



DESCRIPTION:

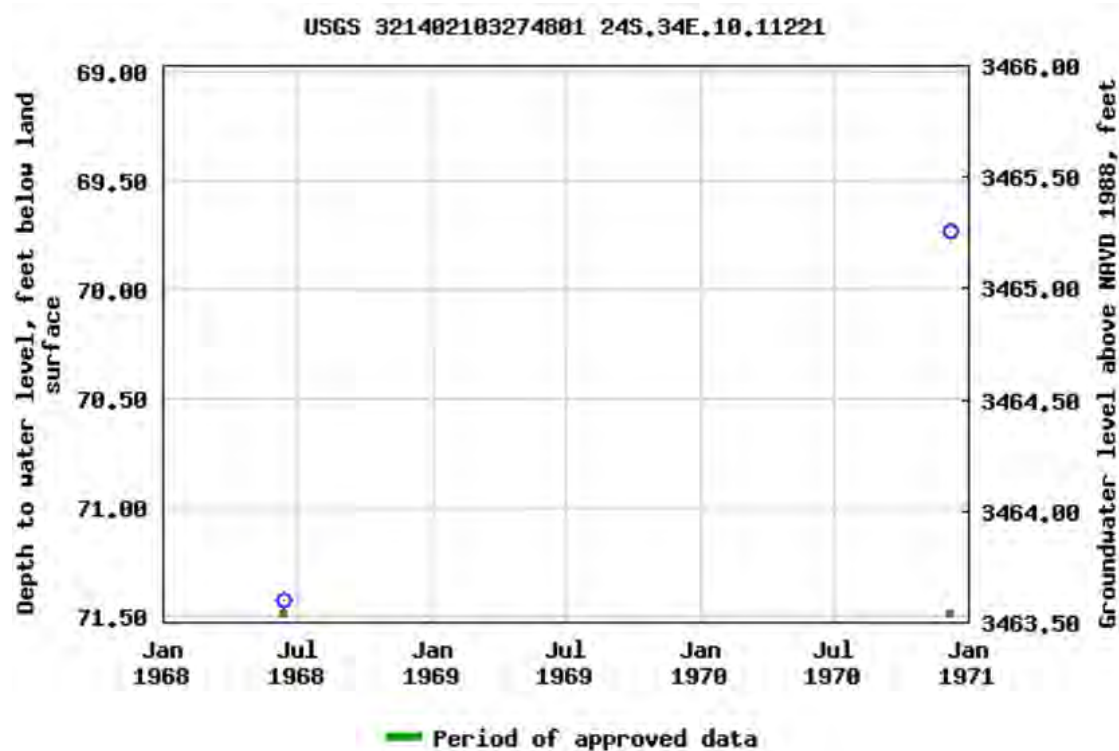
Latitude 32°14'02", Longitude 103°27'48" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,535 feet above NAVD88.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1968-06-12	1970-12-08	2
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](#)



DESCRIPTION:

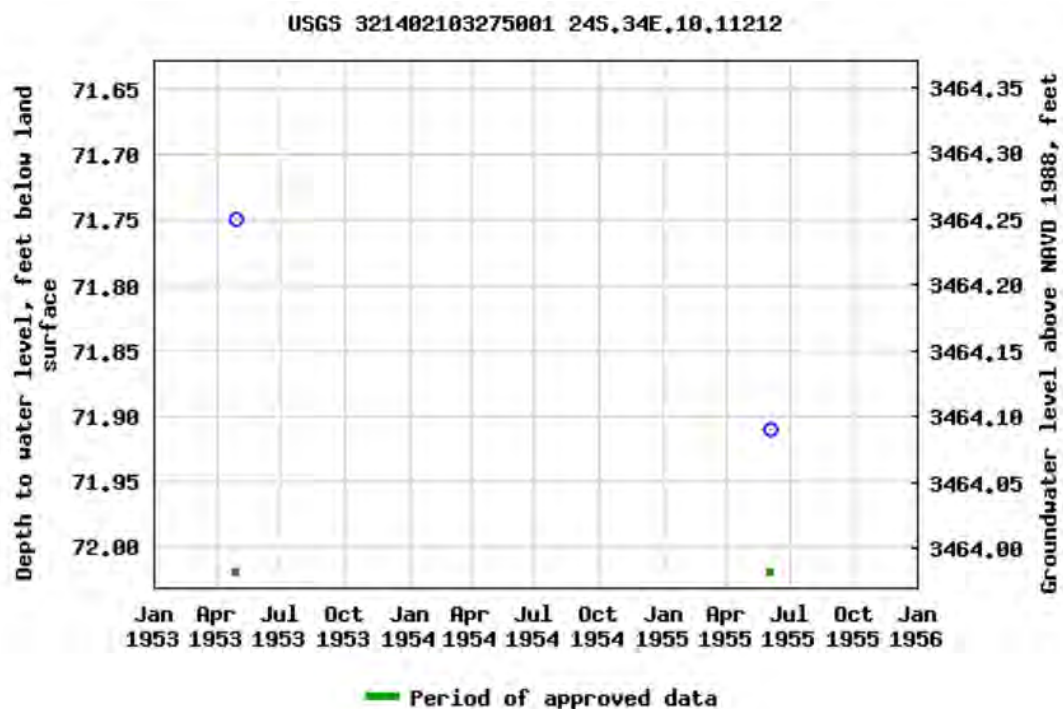
Latitude 32°14'02", Longitude 103°27'50" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 83 feet
Land surface altitude: 3,536 feet above NAVD88.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1953-04-27	1955-06-03	2
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](#)





New Mexico Office of the State Engineer Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03666 POD1	2	3	4	13	24S	33E	639132	3565078

Driller License: 1058	Driller Company: KEY'S DRILLING & PUMP SERVICE	
Driller Name: CASEY KEYS		
Drill Start Date: 10/18/2013	Drill Finish Date: 10/26/2013	Plug Date:
Log File Date: 11/14/2013	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 38 GPM
Casing Size: 8.00	Depth Well: 650 feet	Depth Water: 390 feet

Water Bearing Stratifications:	Top	Bottom	Description
	460	465	Sandstone/Gravel/Conglomerate
	490	535	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	485	650



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
NA	C 03917 POD1	4	1	3	13	24S	33E	638374	3565212 
Driller License: 1058		Driller Company: KEY'S DRILLING & PUMP SERVICE							
Driller Name: CASE KEY									
Drill Start Date: 03/01/2016	Drill Finish Date: 03/04/2016		Plug Date:						
Log File Date: 03/11/2016	PCW Rcv Date:		Source: Shallow						
Pump Type:	Pipe Discharge Size:		Estimated Yield: 30 GPM						
Casing Size: 6.00	Depth Well: 600 feet		Depth Water: 420 feet						
Water Bearing Stratifications:		Top	Bottom	Description					
		520	600	Sandstone/Gravel/Conglomerate					
Casing Perforations:		Top	Bottom						
		300	600						





LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

Compliance · Engineering · Remediation

Identifier:

BH01

Date:

5/27/2020

Striker 6 SWD #1

1RP-5727

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB

Method: Hand Auger

Lat/Long:

32.207878, -103.498522

Field Screening:

Chlorides, PID

Hole Diameter:

3.5"

Total Depth:

6'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	<124	0.8	no	BH01	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
					0.5'	0.5'	SP	SAND, moist, brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
					1	1'		
					2	2'		
moist	<124	1.0	no	BH01	3	3'		
					4	4'		
					5	5'		
					6	6'		
moist	<124	0.9	no	BH01A				
moist	<124	0.5	no	BH01A	6	6'		Total Depth 6 feet bgs

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
dry			no		0	0'	SP	SAND, dry, brown-red, poorly graded, fine-very fine grain, trace off white caliche sand, trace roots, no stain, no odor.
dry			no			5'	CCHE	CALICHE, dry, off white-light pink, moderately consolidated, no stain, no odor.
					10	9'	CCHE	Thin (1-2mm) light brown very fine grain sand laminations.
						14'	CCHE	Some rounded coarse gravel.
					20	19'	CCHE	Some sub-angular tan-light brown well consolidated gravel.
dry			no		30	29'	SP-S	SANDSTONE, dry, tan-light brown, poorly graded, poorly consolidated cobble and gravel, no stain, no odor.
						34'	SP-S	Brown with light brown sandstone pebbles.
moist			no		40	39'	CH-S	MUDSTONE, moist, dark brown-red, high plasticity, cohesive, unconsolidated-poorly consolidated, trace thin (1mm) fine grain light grey sand laminations, no stain, no odor
						44'	CH-S	moderately-well consolidated
					50			
					55			
								Total Depth 55 feet bgs

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	1,008	1.2	no		0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
					1	1'	SP	SAND, moist brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
moist	1,719	1.3	no		2	2'		
					3			
moist	1,848	1.2	no	PH01	4	4'		
					5	5'	CCHE	CALICHE, moist, tan-light pink, poorly consolidated, no stain, no odor.
moist	<124	1.0	no	PH01A	6	6'		
					Total Depth 6 feet bgs			

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	<124	0.2	no	PH02	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
						0.5'	SP	SAND, moist brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
moist	649	1.2	no		1	1'		
					2	2'		
					3			
moist	1,498	1.6	no	PH02A	4	4'		
					5			
moist	207	0.8	no		6	6'		
Total Depth 6 feet bgs								

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	436	0.4	no	PH03	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
						0.5'	SP	SAND, moist brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
					1	1'		
moist	1,094	0.0	no		2	2'		
					3			
moist	<124	0.6	no		4	4'		
moist	<124	0.6	no		PH03A	5	5'	CCHE
				6		6'		
Total Depth 6 feet bgs								

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks			
moist	<124	4.2	no	PH04	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no stain, no odor.			
					1	1'	SP	SAND, moist, brown-red, poorly graded, fine grain, trace clay, no stain, no odor.			
moist	<124	0.2	no		2	2'					
					3						
moist	<124	0.5	no		PH04A	4			4'		
Total Depth 4 feet bgs											



LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

Compliance · Engineering · Remediation

Identifier:

PH05

Date:

5/27/2020

Striker 6 SWD #1

1RP-5727

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB

Method: Hand Auger

Lat/Long:

32.207682, -103.498643

Field Screening:

Chlorides, PID

Hole Diameter:

3.5" w/ handauger

Total Depth:

6'

Comments:

Backhoe used from 0'-2', hand auger used from 2'-6'

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	593	0.8	no	PH05	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
					0.5'	0.5'	SP	SAND, moist, brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
moist	1,383	1.0	no		1	1'		
					2	2'		
					3			
moist	1,187	1.4	no		4	4'		
					5			
moist	<124	1.4	no	PH05A	6	6'		Total Depth 6 feet bgs

[illegible]

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	235	1.2	no	PH07	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no no stain, no odor.
					1	1'	SP	SAND, moist, brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
moist	<124	1.4	no	2	2'			
							3	
moist	<124	0.9	no	4	4'			
							5	
moist	<124	1.0	no	PH07A	6	6'	Total Depth 6 feet bgs	



LT Environmental, Inc.
508 West Stevens Street
Carlsbad, New Mexico 88220

Compliance · Engineering · Remediation

Identifier:

PH08

Date:

5/27/2020

Striker 6 SWD #1

1RP-5727

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB

Method: Hand Auger

Lat/Long:

32.207599, -103.498603

Field Screening:

Chlorides, PID

Hole Diameter:

3.5" w/ handauger

Total Depth:

6'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	1,719	0.8	no	PH08	0	0'	CCHE	CALICHE, moist, tan-light grey, moderately consolidated, no stain, no odor.
					1	1'	SP	SAND, moist, brown-red, poorly graded, fine grain, trace clay, no stain, no odor.
moist	1,601	0.5	no		2	2'		
					3			
moist	1,092	0.6	no		4	4'		
					5	5'	CCHE	CALICHE, moist, tan-light pink, moderately consolidated, no stain, no odor.
moist	<124	0.5	no	PH08A	6	6'		Total Depth 6 feet bgs





Certificate of Analysis Summary 662887

LT Environmental, Inc., Arvada, CO

Project Name: Striker 6 SWD #1

Project Id: 068720006

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 15:29

Report Date: 06.01.2020 14:16

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662887-001	662887-002	662887-003	662887-004	662887-005	662887-006
	Field Id:	PH01	PH01A	PH02	PH02A	PH03	PH03A
	Depth:	4- ft	6- ft	4- ft	6- ft	2- ft	6- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 13:00	05.27.2020 13:20	05.27.2020 13:50	05.27.2020 13:55	05.27.2020 11:20	05.27.2020 14:05
BTEX by EPA 8021B	Extracted:	05.30.2020 10:56	05.30.2020 10:56	05.30.2020 10:56	05.30.2020 10:56	05.30.2020 10:56	05.30.2020 10:56
	Analyzed:	05.31.2020 07:56	05.31.2020 08:17	05.31.2020 08:37	05.31.2020 08:57	05.31.2020 09:18	05.31.2020 09:38
	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	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Xylenes, Total		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	Extracted:	05.28.2020 16:07	05.28.2020 16:07	05.28.2020 16:07	05.28.2020 16:07	05.28.2020 16:07	05.28.2020 16:07
	Analyzed:	05.28.2020 18:56	05.28.2020 19:17	05.28.2020 19:24	05.28.2020 19:31	05.28.2020 19:38	05.28.2020 19:45
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1810 49.8	111 9.98	1660 49.9	249 9.96	1000 9.98	36.7 9.98
TPH by SW8015 Mod	Extracted:	05.28.2020 17:00	05.28.2020 17:00	05.28.2020 17:00	05.28.2020 17:00	05.28.2020 17:00	05.28.2020 17:00
	Analyzed:	05.28.2020 20:07	05.28.2020 18:45	05.28.2020 19:06	05.28.2020 19:26	05.28.2020 19:46	05.28.2020 20:07
	Units/RL:	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	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Total GRO-DRO		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Total TPH		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<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.

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 662887

LT Environmental, Inc., Arvada, CO

Project Name: Striker 6 SWD #1

Project Id: 068720006

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 15:29

Report Date: 06.01.2020 14:16

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662887-007	662887-008	662887-009	662887-010	662887-011	662887-012
	Field Id:	PH04	PH04A	PH05	PH05A	PH06	PH06A
	Depth:	2- ft	4- ft	2- ft	6- ft	1- ft	4- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 11:35	05.27.2020 14:10	05.27.2020 12:00	05.27.2020 13:40	05.27.2020 11:38	05.27.2020 14:25
BTEX by EPA 8021B	Extracted:	05.30.2020 10:56	05.30.2020 10:56	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42
	Analyzed:	05.31.2020 09:59	05.31.2020 10:19	05.30.2020 19:01	05.30.2020 20:43	05.30.2020 21:04	05.30.2020 21:24
	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	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00396 0.00396	<0.00397 0.00397	<0.00395 0.00395	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Xylenes, Total		<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	Extracted:	05.28.2020 16:07	05.28.2020 16:07	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38
	Analyzed:	05.28.2020 19:52	05.28.2020 19:59	05.28.2020 20:41	05.28.2020 21:02	05.28.2020 21:09	05.28.2020 21:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		41.8 10.1	99.8 9.98	1250 10.0	73.5 10.0	158 10.0	32.2 10.1
TPH by SW8015 Mod	Extracted:	05.28.2020 17:00	05.28.2020 17:00	05.29.2020 16:40	05.29.2020 11:27	05.29.2020 16:40	05.29.2020 16:40
	Analyzed:	05.28.2020 20:28	05.28.2020 20:48	05.30.2020 02:00	05.30.2020 00:19	05.30.2020 03:01	05.30.2020 03:21
	Units/RL:	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	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2
Total GRO-DRO		<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2
Total TPH		<49.9 49.9	<50.2 50.2	<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.2 50.2

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 662887

LT Environmental, Inc., Arvada, CO

Project Name: Striker 6 SWD #1

Project Id: 068720006

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 05.28.2020 15:29

Report Date: 06.01.2020 14:16

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	662887-013	662887-014	662887-015	662887-016	662887-017	662887-018
	Field Id:	PH07	PH07A	PH08	PH08A	BH01	BH01A
	Depth:	1- ft	6- ft	1- ft	6- ft	2- ft	6- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	05.27.2020 11:45	05.27.2020 14:35	05.27.2020 14:40	05.27.2020 14:55	05.27.2020 15:10	05.27.2020 15:30
BTEX by EPA 8021B	Extracted:	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42	05.29.2020 17:42
	Analyzed:	05.30.2020 21:45	05.30.2020 22:05	05.30.2020 23:06	05.30.2020 23:26	05.30.2020 23:47	05.31.2020 00:07
	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	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00402 0.00402	<0.00403 0.00403	<0.00403 0.00403	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Xylenes, Total		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Chloride by EPA 300	Extracted:	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38	05.28.2020 17:38
	Analyzed:	05.28.2020 21:23	05.28.2020 21:44	05.28.2020 21:51	05.28.2020 21:58	05.28.2020 22:05	05.28.2020 22:12
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		162 9.80	363 10.0	1400 10.1	79.0 9.98	34.8 9.94	15.3 9.98
TPH by SW8015 Mod	Extracted:	05.29.2020 16:40	05.29.2020 16:40	05.29.2020 16:40	05.29.2020 16:40	05.29.2020 16:40	05.29.2020 16:40
	Analyzed:	05.30.2020 03:42	05.30.2020 04:02	05.30.2020 04:22	05.30.2020 04:43	05.30.2020 05:03	05.30.2020 05:24
	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	<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.1 50.1	<50.0 50.0
Diesel Range Organics (DRO)		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.1 50.1	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.1 50.1	<50.0 50.0
Total GRO-DRO		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.1 50.1	<50.0 50.0
Total TPH		<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.3 50.3	<50.1 50.1	<50.0 50.0

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Jessica Kramer
Project Manager



Analytical Report 662887

for

LT Environmental, Inc.

Project Manager: Dan Moir

Striker 6 SWD #1

068720006

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): **662887**
Striker 6 SWD #1
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) 662887. 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. 662887 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

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Sample Cross Reference 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	05.27.2020 13:00	4 ft	662887-001
PH01A	S	05.27.2020 13:20	6 ft	662887-002
PH02	S	05.27.2020 13:50	4 ft	662887-003
PH02A	S	05.27.2020 13:55	6 ft	662887-004
PH03	S	05.27.2020 11:20	2 ft	662887-005
PH03A	S	05.27.2020 14:05	6 ft	662887-006
PH04	S	05.27.2020 11:35	2 ft	662887-007
PH04A	S	05.27.2020 14:10	4 ft	662887-008
PH05	S	05.27.2020 12:00	2 ft	662887-009
PH05A	S	05.27.2020 13:40	6 ft	662887-010
PH06	S	05.27.2020 11:38	1 ft	662887-011
PH06A	S	05.27.2020 14:25	4 ft	662887-012
PH07	S	05.27.2020 11:45	1 ft	662887-013
PH07A	S	05.27.2020 14:35	6 ft	662887-014
PH08	S	05.27.2020 14:40	1 ft	662887-015
PH08A	S	05.27.2020 14:55	6 ft	662887-016
BH01	S	05.27.2020 15:10	2 ft	662887-017
BH01A	S	05.27.2020 15:30	6 ft	662887-018



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: Striker 6 SWD #1

Project ID: 068720006
Work Order Number(s): 662887

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 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH01**
Lab Sample Id: 662887-001

Matrix: Soil
Date Collected: 05.27.2020 13:00

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1810	49.8	mg/kg	05.28.2020 18:56		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127284

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.28.2020 20:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.28.2020 20:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.28.2020 20:07	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	05.28.2020 20:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.28.2020 20:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	05.28.2020 20:07	
o-Terphenyl	84-15-1	110	%	70-135	05.28.2020 20:07	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH01**
Lab Sample Id: 662887-001

Matrix: Soil
Date Collected: 05.27.2020 13:00

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Seq Number: 3127493

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.31.2020 07:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.31.2020 07:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.31.2020 07:56	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.31.2020 07:56	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH01A**
Lab Sample Id: 662887-002

Matrix: Soil
Date Collected: 05.27.2020 13:20

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	111	9.98	mg/kg	05.28.2020 19:17		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.28.2020 18:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.28.2020 18:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.28.2020 18:45	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.28.2020 18:45	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.28.2020 18:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.28.2020 18:45	
o-Terphenyl	84-15-1	88	%	70-135	05.28.2020 18:45	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH01A**
Lab Sample Id: 662887-002

Matrix: Soil
Date Collected: 05.27.2020 13:20

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.31.2020 08:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.31.2020 08:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.31.2020 08:17	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.31.2020 08:17	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH02**
Lab Sample Id: 662887-003

Matrix: Soil
Date Collected: 05.27.2020 13:50

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1660	49.9	mg/kg	05.28.2020 19:24		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.28.2020 19:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.28.2020 19:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.28.2020 19:06	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	05.28.2020 19:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.28.2020 19:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	05.28.2020 19:06	
o-Terphenyl	84-15-1	75	%	70-135	05.28.2020 19:06	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH02**
Lab Sample Id: 662887-003

Matrix: Soil
Date Collected: 05.27.2020 13:50

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.31.2020 08:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.31.2020 08:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.31.2020 08:37		
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.31.2020 08:37		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH02A**
Lab Sample Id: 662887-004

Matrix: Soil
Date Collected: 05.27.2020 13:55

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	249	9.96	mg/kg	05.28.2020 19:31		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.28.2020 19:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.28.2020 19:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.28.2020 19:26	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	05.28.2020 19:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.28.2020 19:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	05.28.2020 19:26	
o-Terphenyl	84-15-1	84	%	70-135	05.28.2020 19:26	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH02A**
Lab Sample Id: 662887-004

Matrix: Soil
Date Collected: 05.27.2020 13:55

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.31.2020 08:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.31.2020 08:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.31.2020 08:57		
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.31.2020 08:57		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH03**
Lab Sample Id: 662887-005

Matrix: Soil
Date Collected: 05.27.2020 11:20

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1000	9.98	mg/kg	05.28.2020 19:38		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.28.2020 19:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.28.2020 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.28.2020 19:46	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.28.2020 19:46	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.28.2020 19:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	05.28.2020 19:46	
o-Terphenyl	84-15-1	71	%	70-135	05.28.2020 19:46	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH03**
Lab Sample Id: 662887-005

Matrix: Soil
Date Collected: 05.27.2020 11:20

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Seq Number: 3127493

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.31.2020 09:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.31.2020 09:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	05.31.2020 09:18		
1,4-Difluorobenzene	540-36-3	112	%	70-130	05.31.2020 09:18		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH03A**
Lab Sample Id: 662887-006

Matrix: Soil
Date Collected: 05.27.2020 14:05

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.7	9.98	mg/kg	05.28.2020 19:45		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 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	05.28.2020 20:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.28.2020 20:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.28.2020 20:07	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.28.2020 20:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.28.2020 20:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	05.28.2020 20:07	
o-Terphenyl	84-15-1	81	%	70-135	05.28.2020 20:07	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH03A**
Lab Sample Id: 662887-006

Matrix: Soil
Date Collected: 05.27.2020 14:05

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.31.2020 09:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.31.2020 09:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.31.2020 09:38		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.31.2020 09:38		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH04**
Lab Sample Id: 662887-007

Matrix: Soil
Date Collected: 05.27.2020 11:35

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.8	10.1	mg/kg	05.28.2020 19:52		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.28.2020 20:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.28.2020 20:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.28.2020 20:28	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	05.28.2020 20:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.28.2020 20:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.28.2020 20:28	
o-Terphenyl	84-15-1	90	%	70-135	05.28.2020 20:28	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH04**
Lab Sample Id: 662887-007

Matrix: Soil
Date Collected: 05.27.2020 11:35

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.31.2020 09:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.31.2020 09:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.31.2020 09:59		
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.31.2020 09:59		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH04A**
Lab Sample Id: 662887-008

Matrix: Soil
Date Collected: 05.27.2020 14:10

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127353

Date Prep: 05.28.2020 16:07

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.8	9.98	mg/kg	05.28.2020 19:59		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127285

Date Prep: 05.28.2020 17:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.28.2020 20:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.28.2020 20:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.28.2020 20:48	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.28.2020 20:48	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.28.2020 20:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	05.28.2020 20:48	
o-Terphenyl	84-15-1	72	%	70-135	05.28.2020 20:48	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH04A**
Lab Sample Id: 662887-008

Matrix: Soil
Date Collected: 05.27.2020 14:10

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127493

Prep Method: SW5035A

% Moisture:

Date Prep: 05.30.2020 10:56

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.31.2020 10:19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.31.2020 10:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.31.2020 10:19	
1,4-Difluorobenzene	540-36-3	108	%	70-130	05.31.2020 10:19	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH05** Matrix: Soil Date Received: 05.28.2020 15:29
Lab Sample Id: 662887-009 Date Collected: 05.27.2020 12:00 Sample Depth: 2 ft
Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 05.28.2020 17:38 Basis: Wet Weight
Seq Number: 3127354

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1250	10.0	mg/kg	05.28.2020 20:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 05.29.2020 16:40 Basis: Wet Weight
Seq Number: 3127498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.30.2020 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.30.2020 02:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.30.2020 02:00	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.30.2020 02:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.30.2020 02:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	05.30.2020 02:00	
o-Terphenyl	84-15-1	90	%	70-135	05.30.2020 02:00	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH05**
Lab Sample Id: 662887-009

Matrix: Soil
Date Collected: 05.27.2020 12:00

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	05.30.2020 19:01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.30.2020 19:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.30.2020 19:01		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.30.2020 19:01		



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH05A**
Lab Sample Id: 662887-010

Matrix: Soil
Date Collected: 05.27.2020 13:40

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.5	10.0	mg/kg	05.28.2020 21:02		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127513

Date Prep: 05.29.2020 11:27

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.30.2020 00:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.30.2020 00:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.30.2020 00:19	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.30.2020 00:19	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.30.2020 00:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.30.2020 00:19	
o-Terphenyl	84-15-1	92	%	70-135	05.30.2020 00:19	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH05A**
Lab Sample Id: 662887-010

Matrix: Soil
Date Collected: 05.27.2020 13:40

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	05.30.2020 20:43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.30.2020 20:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.30.2020 20:43		
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.30.2020 20:43		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH06**
Lab Sample Id: 662887-011

Matrix: Soil
Date Collected: 05.27.2020 11:38

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	158	10.0	mg/kg	05.28.2020 21:09		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.30.2020 03:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.30.2020 03:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.30.2020 03:01	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.30.2020 03:01	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.30.2020 03:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	05.30.2020 03:01	
o-Terphenyl	84-15-1	91	%	70-135	05.30.2020 03:01	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH06**
Lab Sample Id: 662887-011

Matrix: Soil
Date Collected: 05.27.2020 11:38

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.30.2020 21:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.30.2020 21:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.30.2020 21:04		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.30.2020 21:04		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH06A**
Lab Sample Id: 662887-012

Matrix: Soil
Date Collected: 05.27.2020 14:25

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.2	10.1	mg/kg	05.28.2020 21:16		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.30.2020 03:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.30.2020 03:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.30.2020 03:21	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.30.2020 03:21	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.30.2020 03:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	05.30.2020 03:21	
o-Terphenyl	84-15-1	95	%	70-135	05.30.2020 03:21	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH06A**
Lab Sample Id: 662887-012

Matrix: Soil
Date Collected: 05.27.2020 14:25

Date Received: 05.28.2020 15:29
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.30.2020 21:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.30.2020 21:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.30.2020 21:24		
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.30.2020 21:24		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH07**
Lab Sample Id: 662887-013

Matrix: Soil
Date Collected: 05.27.2020 11:45

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	162	9.80	mg/kg	05.28.2020 21:23		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.30.2020 03:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.30.2020 03:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.30.2020 03:42	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.30.2020 03:42	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.30.2020 03:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.30.2020 03:42	
o-Terphenyl	84-15-1	93	%	70-135	05.30.2020 03:42	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH07**
Lab Sample Id: 662887-013

Matrix: Soil
Date Collected: 05.27.2020 11:45

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.30.2020 21:45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.30.2020 21:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.30.2020 21:45		
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.30.2020 21:45		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH07A**
Lab Sample Id: 662887-014

Matrix: Soil
Date Collected: 05.27.2020 14:35

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	363	10.0	mg/kg	05.28.2020 21:44		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.30.2020 04:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.30.2020 04:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.30.2020 04:02	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	05.30.2020 04:02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.30.2020 04:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	05.30.2020 04:02	
o-Terphenyl	84-15-1	92	%	70-135	05.30.2020 04:02	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH07A**
Lab Sample Id: 662887-014

Matrix: Soil
Date Collected: 05.27.2020 14:35

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.30.2020 22:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.30.2020 22:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.30.2020 22:05		
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.30.2020 22:05		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH08**
Lab Sample Id: 662887-015

Matrix: Soil
Date Collected: 05.27.2020 14:40

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1400	10.1	mg/kg	05.28.2020 21:51		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	05.30.2020 04:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	05.30.2020 04:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	05.30.2020 04:22	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	05.30.2020 04:22	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	05.30.2020 04:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.30.2020 04:22	
o-Terphenyl	84-15-1	94	%	70-135	05.30.2020 04:22	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH08**
Lab Sample Id: 662887-015

Matrix: Soil
Date Collected: 05.27.2020 14:40

Date Received: 05.28.2020 15:29
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	05.30.2020 23:06	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
Total BTEX		<0.00201	0.00201	mg/kg	05.30.2020 23:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.30.2020 23:06		
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.30.2020 23:06		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH08A**
Lab Sample Id: 662887-016

Matrix: Soil
Date Collected: 05.27.2020 14:55

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.0	9.98	mg/kg	05.28.2020 21:58		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	05.30.2020 04:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	05.30.2020 04:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	05.30.2020 04:43	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	05.30.2020 04:43	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	05.30.2020 04:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	05.30.2020 04:43	
o-Terphenyl	84-15-1	95	%	70-135	05.30.2020 04:43	



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LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **PH08A**
Lab Sample Id: 662887-016

Matrix: Soil
Date Collected: 05.27.2020 14:55

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.30.2020 23:26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.30.2020 23:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	05.30.2020 23:26	
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.30.2020 23:26	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **BH01**
Lab Sample Id: 662887-017

Matrix: Soil
Date Collected: 05.27.2020 15:10

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.8	9.94	mg/kg	05.28.2020 22:05		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	05.30.2020 05:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	05.30.2020 05:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	05.30.2020 05:03	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	05.30.2020 05:03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	05.30.2020 05:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	05.30.2020 05:03	
o-Terphenyl	84-15-1	97	%	70-135	05.30.2020 05:03	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **BH01**
Lab Sample Id: 662887-017

Matrix: Soil
Date Collected: 05.27.2020 15:10

Date Received: 05.28.2020 15:29
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.30.2020 23:47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.30.2020 23:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.30.2020 23:47		
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.30.2020 23:47		



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **BH01A**
Lab Sample Id: 662887-018

Matrix: Soil
Date Collected: 05.27.2020 15:30

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3127354

Date Prep: 05.28.2020 17:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.3	9.98	mg/kg	05.28.2020 22:12		1

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3127498

Date Prep: 05.29.2020 16:40

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	05.30.2020 05:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.30.2020 05:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.30.2020 05:24	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	05.30.2020 05:24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.30.2020 05:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	05.30.2020 05:24	
o-Terphenyl	84-15-1	93	%	70-135	05.30.2020 05:24	



Certificate of Analytical Results 662887

LT Environmental, Inc., Arvada, CO

Striker 6 SWD #1

Sample Id: **BH01A**
Lab Sample Id: 662887-018

Matrix: Soil
Date Collected: 05.27.2020 15:30

Date Received: 05.28.2020 15:29
Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3127502

Prep Method: SW5035A

% Moisture:

Date Prep: 05.29.2020 17:42

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.31.2020 00:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
Xylenes, Total	1330-20-7	<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.31.2020 00:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.31.2020 00:07		
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.31.2020 00:07		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



QC Summary 662887

LT Environmental, Inc.

Striker 6 SWD #1

Analytical Method: Chloride by EPA 300

Seq Number: 3127353

MB Sample Id: 7704354-1-BLK

Matrix: Solid

LCS Sample Id: 7704354-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704354-1-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	256	102	90-110	1	20	mg/kg	05.28.2020 16:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3127354

MB Sample Id: 7704356-1-BLK

Matrix: Solid

LCS Sample Id: 7704356-1-BKS

Prep Method: E300P

Date Prep: 05.28.2020

LCSD Sample Id: 7704356-1-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 20:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3127353

Parent Sample Id: 662872-006

Matrix: Soil

MS Sample Id: 662872-006 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662872-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	50.7	202	246	97	246	97	90-110	0	20	mg/kg	05.28.2020 17:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3127353

Parent Sample Id: 662883-004

Matrix: Soil

MS Sample Id: 662883-004 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662883-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	110	201	322	105	323	106	90-110	0	20	mg/kg	05.28.2020 18:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3127354

Parent Sample Id: 662887-009

Matrix: Soil

MS Sample Id: 662887-009 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662887-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1250	201	1440	95	1440	95	90-110	0	20	mg/kg	05.28.2020 20:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3127354

Parent Sample Id: 662898-001

Matrix: Soil

MS Sample Id: 662898-001 S

Prep Method: E300P

Date Prep: 05.28.2020

MSD Sample Id: 662898-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	218	199	406	94	407	95	90-110	0	20	mg/kg	05.28.2020 22:25	

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.

Striker 6 SWD #1

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

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127513

MB Sample Id: 7704374-1-BLK

Matrix: Solid

LCS Sample Id: 7704374-1-BKS

Prep Method: SW8015P

Date Prep: 05.29.2020

LCSD Sample Id: 7704374-1-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	924	92	932	93	70-135	1	35	mg/kg	05.29.2020 16:08	
Diesel Range Organics (DRO)	<50.0	1000	957	96	961	96	70-135	0	35	mg/kg	05.29.2020 16:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		121		122		70-135	%	05.29.2020 16:08
o-Terphenyl	93		97		97		70-135	%	05.29.2020 16:08

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.

Striker 6 SWD #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127498

MB Sample Id: 7704417-1-BLK

Matrix: Solid

LCS Sample Id: 7704417-1-BKS

Prep Method: SW8015P

Date Prep: 05.29.2020

LCSD Sample Id: 7704417-1-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	901	90	887	89	70-135	2	35	mg/kg	05.30.2020 01:20	
Diesel Range Organics (DRO)	<50.0	1000	975	98	956	96	70-135	2	35	mg/kg	05.30.2020 01:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		108		107		70-135	%	05.30.2020 01:20
o-Terphenyl	95		102		101		70-135	%	05.30.2020 01:20

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	

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	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127513

Matrix: Solid

MB Sample Id: 7704374-1-BLK

Prep Method: SW8015P

Date Prep: 05.29.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.29.2020 15:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127498

Matrix: Solid

MB Sample Id: 7704417-1-BLK

Prep Method: SW8015P

Date Prep: 05.29.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.30.2020 00:59	

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



QC Summary 662887

LT Environmental, Inc.

Striker 6 SWD #1

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: 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: TPH by SW8015 Mod

Seq Number: 3127513

Parent Sample Id: 662898-061

Matrix: Soil

MS Sample Id: 662898-061 S

Prep Method: SW8015P

Date Prep: 05.29.2020

MSD Sample Id: 662898-061 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	890	89	908	91	70-135	2	35	mg/kg	05.29.2020 17:09	
Diesel Range Organics (DRO)	<49.9	998	919	92	937	94	70-135	2	35	mg/kg	05.29.2020 17:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		107		70-135	%	05.29.2020 17:09
o-Terphenyl	97		95		70-135	%	05.29.2020 17:09

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



QC Summary 662887

LT Environmental, Inc.

Striker 6 SWD #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3127498

Parent Sample Id: 662887-009

Matrix: Soil

MS Sample Id: 662887-009 S

Prep Method: SW8015P

Date Prep: 05.29.2020

MSD Sample Id: 662887-009 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)	<50.2	1000	977	98	901	90	70-135	8	35	mg/kg	05.30.2020 02:21	
Diesel Range Organics (DRO)	<50.2	1000	1050	105	964	96	70-135	9	35	mg/kg	05.30.2020 02:21	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		106		70-135	%	05.30.2020 02:21
o-Terphenyl	110		99		70-135	%	05.30.2020 02:21

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127502

MB Sample Id: 7704413-1-BLK

Matrix: Solid

LCS Sample Id: 7704413-1-BKS

Prep Method: SW5035A

Date Prep: 05.29.2020

LCSD Sample Id: 7704413-1-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	0.105	105	0.108	108	70-130	3	35	mg/kg	05.30.2020 17:19	
Toluene	<0.00200	0.100	0.101	101	0.103	103	70-130	2	35	mg/kg	05.30.2020 17:19	
Ethylbenzene	<0.00200	0.100	0.0947	95	0.0954	95	71-129	1	35	mg/kg	05.30.2020 17:19	
m,p-Xylenes	<0.00400	0.200	0.194	97	0.194	97	70-135	0	35	mg/kg	05.30.2020 17:19	
o-Xylene	<0.00200	0.100	0.0990	99	0.0994	99	71-133	0	35	mg/kg	05.30.2020 17:19	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		106		107		70-130	%	05.30.2020 17:19
4-Bromofluorobenzene	96		91		91		70-130	%	05.30.2020 17:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127493

MB Sample Id: 7704337-1-BLK

Matrix: Solid

LCS Sample Id: 7704337-1-BKS

Prep Method: SW5035A

Date Prep: 05.30.2020

LCSD Sample Id: 7704337-1-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	0.110	110	0.108	108	70-130	2	35	mg/kg	05.31.2020 01:29	
Toluene	<0.00200	0.100	0.103	103	0.103	103	70-130	0	35	mg/kg	05.31.2020 01:29	
Ethylbenzene	<0.00200	0.100	0.0965	97	0.0965	97	71-129	0	35	mg/kg	05.31.2020 01:29	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.198	99	70-135	1	35	mg/kg	05.31.2020 01:29	
o-Xylene	<0.00200	0.100	0.101	101	0.101	101	71-133	0	35	mg/kg	05.31.2020 01:29	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		107		108		70-130	%	05.31.2020 01:29
4-Bromofluorobenzene	95		93		93		70-130	%	05.31.2020 01:29

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



QC Summary 662887

LT Environmental, Inc.

Striker 6 SWD #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127502

Parent Sample Id: 662887-009

Matrix: Soil

MS Sample Id: 662887-009 S

Prep Method: SW5035A

Date Prep: 05.29.2020

MSD Sample Id: 662887-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0938	94	0.106	106	70-130	12	35	mg/kg	05.30.2020 18:00	
Toluene	<0.00200	0.100	0.0818	82	0.0982	98	70-130	18	35	mg/kg	05.30.2020 18:00	
Ethylbenzene	<0.00200	0.100	0.0705	71	0.0877	88	71-129	22	35	mg/kg	05.30.2020 18:00	
m,p-Xylenes	<0.00400	0.200	0.139	70	0.177	89	70-135	24	35	mg/kg	05.30.2020 18:00	
o-Xylene	<0.00200	0.100	0.0739	74	0.0900	90	71-133	20	35	mg/kg	05.30.2020 18:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	05.30.2020 18:00
4-Bromofluorobenzene	94		93		70-130	%	05.30.2020 18:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3127493

Parent Sample Id: 662872-006

Matrix: Soil

MS Sample Id: 662872-006 S

Prep Method: SW5035A

Date Prep: 05.30.2020

MSD Sample Id: 662872-006 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	106	70-130	1	35	mg/kg	05.31.2020 10:40	
Toluene	<0.00200	0.100	0.0984	98	0.0996	100	70-130	1	35	mg/kg	05.31.2020 10:40	
Ethylbenzene	<0.00200	0.100	0.0910	91	0.0920	92	71-129	1	35	mg/kg	05.31.2020 10:40	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.187	94	70-135	2	35	mg/kg	05.31.2020 10:40	
o-Xylene	<0.00200	0.100	0.0951	95	0.0970	97	71-133	2	35	mg/kg	05.31.2020 10:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		107		70-130	%	05.31.2020 10:40
4-Bromofluorobenzene	92		89		70-130	%	05.31.2020 10:40

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



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Chain of Custody

Work Order No: 16162887

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 (770-449-8600) Tampa, FL (813-620-2000)

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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:	bbeill@ltenv.com

Project Name:	Stiller 6500 #1	Turn Around	
Project Number:	(480-5727) 068720006	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Benjamin Beill	Due Date:	

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

Project Name:	Stiller 6500 #1	Turn Around	
Project Number:	(480-5727) 068720006	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Benjamin Beill	Due Date:	

Temp Blank:	Yes	No	Wet Ice:	Yes	No
Received Intact:	Yes	No	Thermometer ID		
Cooler Custody Seals:	Yes	No	Correction Factor:		
Sample Custody Seals:	Yes	No	Total Containers:		

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Received Intact:		Yes	No	Thermometer ID			
Cooler Custody Seals:		Yes	No	Correction Factor:			
Sample Custody Seals:		Yes	No	Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
PH06	S	5/27/20	11:38	1'	1	X	X	X
PH06A			14:25	4'	1	X	X	X
PH07			14:45	1'	1	X	X	X
PH07A			14:35	6'	1	X	X	X
PH08			14:40	1'	1	X	X	X
PH08A			14:55	6'	1	X	X	X
BHO1			15:00	2'	1	X	X	X
BHO1A			15:30	6'	1	X	X	X

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

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

1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		5/28/20 05:08 PM			2
		15:29			4
					6