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	NRM1935840155
District RP	
Facility ID	
Application ID	

## **Release Notification**

**Responsible Party** 

## WPIJ6-191106-C-1410

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

#### Location of Release Source

Latitude	32.277111	Longitude <u>-103.935915</u>
	(NAD 83 in decimal de	degrees to 5 decimal places)
Site Nam	ne REMUDA SOUTH 25 STATE 126H	Site Type Well Location
Date Rel	ease Discovered 10/22/2019	API# (if applicable) 30-015-44392 (REMUDA SOUTH 25 STATE
		126H)

Unit Letter	Section	Township	Range	County	
G	25	238	29E	EDDY	

Surface Owner: State Federal Tribal Private (Name: \_

#### Nature and Volume of Release

Crude Oil	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0
Produced Water	Volume Released (bbls) 8.8	Volume Recovered (bbls) 8.0
	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: During drilling operations a returns flow line was parted at a slip joint. Approximately 8.8 bbls of produced water was released to pad surface, a vacuum truck recovered 8 bbls. Additional third party resources have been retained to assist in the remediation.

Received/by (OCD:11/18/2021/2):20:3 PPM

Form C-141 State of New Mexico			
	State of New Mexico	Incident ID	NRM1935840155
Page 2 Oil Conservation	Oil Conservation Division	District RP	
		Facility ID	

Application ID

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

#### **Initial Response**

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

 $\square$  The source of the release has been stopped.

It he impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

There were no fluids released to be contained via the use of berms or dikes, absorbent pads, or other containment devices.

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

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

Printed Name: Kyle Littrell	Title: SH&E Supervisor
Signatures Peterek	Date:11/6/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:
OCD Only	
Received by: Ramona Marcus	Date: <u>12/24/2019</u>

## 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>&gt;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 <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\square$  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.

Page 3

<b>Received by OCD: 1/18/20</b> Form C-141 Page 4	21 2:20:31 PM State of New Me Oil Conservation D		Incident ID District RP Facility ID Application ID	Page 4 of 138           NRM1935840155
regulations all operators are public health or the environ failed to adequately investig addition, OCD acceptance of	rmation given above is true and comp required to report and/or file certain r ment. The acceptance of a C-141 repo ate and remediate contamination that f a C-141 report does not relieve the one <u>_Kyle Littrell</u>	release notifications and perform of ort by the OCD does not relieve the pose a threat to groundwater, sur- operator of responsibility for comp	corrective actions for rele ne operator of liability sh face water, human health pliance with any other fe	eases which may endanger ould their operations have or the environment. In deral, state, or local laws
Printed Name:	<u>Kyle Littrell</u>	Title: <u>SH&amp;E</u>	Supervisor	
Signature:		Date: <u>01/18/20</u>		
email: <u>Kyle_Litt</u>	rell@xtoenergy.com	Telephone:	<u>(432)-221-7331</u>	
OCD Only				
Received by:		Date:		-

Page 6

Oil Conservation Division

	Page 5 of 138
Incident ID	NRM1935840155
District RP	
Facility ID	
Application ID	

## Closure

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

<b><u>Closure Report Attachment Checklist</u></b> : Each of the following it	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 must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office	
Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.		
Printed Name: Kyle Littrell Signature: Signature:	Title:SH&E Supervisor	
Signature:	Date: 01/18/2021	
email:Kyle_Littrell@xtoenergy.com	Telephone: 432-221-7331	
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: Karen Collins	Date: <u>4/7/2021</u>	
Printed Name: Kaun Pollins	Title: Environmental Scientist & Specialist	

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	NRM2000235975
District RP	
Facility ID	
Application ID	

## **Release Notification**

**Responsible Party** 

## Y17V0-191108-C-1410

Responsible Party XTO Energy	OGRID 5380	
Contact Name Kyle Littrell	Contact Telephone 432-221-7331	
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)	
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220		

#### Location of Release Source

Latitude <u>32.277111</u>	Longitude <u>-103.935915</u>
(NAD 83 in decimal d	egrees to 5 decimal places)
Site Name REMUDA SOUTH 25 STATE 126H	Site Type Well Location
Date Release Discovered 10/25/2019	API# (if applicable) 30-015-44392

Unit Letter	Section	Township	Range	County	
G	25	238	29E	EDDY	

Surface Owner: State Federal Tribal Private (Name:

#### Nature and Volume of Release

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

Crude Oil	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0
Produced Water	Volume Released (bbls) 10.0	Volume Recovered (bbls) 8.5
	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: During drilling operations a returns flow line was parted at a slip joint. Approximately 10 bbls of produced water was released to pad surface, a vacuum truck recovered 8.5 bbls. Additional third party resources have been retained to assist in the remediation.

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Form C-141	State of New Mexico		
		Incident ID	NRM2000235975
Page 2	Oil Conservation Division	District RP	
		Facility ID	

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

Application ID

#### **Initial Response**

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

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

There were no fluids released to be contained via the use of berms or dikes, absorbent pads, or other containment devices.

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

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

Printed Name: Kyle Littrell	Title: <u>SH&amp;E Supervisor</u>
Signature: Cefulent	Date:11/8/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:
OCD Only	
Received by: Ramona Marcus	Date: 01/02/2020

## 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>&gt;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 <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\square$  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.

Page 3

<b>Received by OCD: 1/18/202</b> Form C-141 Page 4	<i>1 2:20:31 PM</i> State of New Me Oil Conservation D		Incident ID District RP Facility ID Application ID	Page 9 of 138 NRM2000235975
regulations all operators are r public health or the environm failed to adequately investiga addition, OCD acceptance of	mation given above is true and comp equired to report and/or file certain r tent. The acceptance of a C-141 report te and remediate contamination that a C-141 report does not relieve the c <u>Kyle Littrell</u>	elease notifications and perfo ort by the OCD does not relier pose a threat to groundwater, perator of responsibility for o	rm corrective actions for re ve the operator of liability s surface water, human healt compliance with any other f	leases which may endanger hould their operations have h or the environment. In
Printed Name:	<u>_Kyle Littrell</u>	Title: <u>SH</u>	&E Supervisor	
Signature:	o Jutat	Date:01/18	8/2021	
email: <u>Kyle_Littre</u>	ll@xtoenergy.com		e: <u>(432)-221-7331</u>	
OCD Only				
Received by:		Date:		_

Page 6

Oil Conservation Division

Incident ID	NNRM2000235975
District RP	
Facility ID	
Application ID	

## Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.		
A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office	
Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.		
Printed Name: Kyle Littrell	Title:SH&E Supervisor	
Printed Name: <u>Kyle Littrell</u> Signature: <i>Signature:</i>	Date: <u>01/18/2021</u>	
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331	
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: Karen Collins	Date: <u>4/7/2021</u>	
Printed Name: Kaun Collins	Title: Environmental Scientist & Specialist	

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	NRM2000237294
District RP	
Facility ID	
Application ID	

## **Release Notification**

**Responsible Party** 

## N949D-191108-C-1410

Responsible Party XTO Energy	OGRID 5380	
Contact Name Kyle Littrell	Contact Telephone 432-221-7331	
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)	
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220		

#### Location of Release Source

Latitude	32.277111

*NAD* 83 in decimal degrees to 5 decimal places)

Site Name REMUDA SOUTH 25 STATE 126H	Site Type Well Location
Date Release Discovered 10/25/2019	AP1# (if applicable) 30-015-44392

Unit Letter	Unit Letter Section Township		Range	County		
G	25	238	29E	EDDY		

Surface Owner: State Federal Tribal Private (Name)

#### Nature and Volume of Release

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

Crude Oil	Volume Released (bbls) 0.0	Volume Recovered (bbls) 0.0
Produced Water	Volume Released (bbls) 5.0	Volume Recovered (bbls) 4.0
	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: During drilling operations a returns flow line was parted at a slip joint. Approximately 5 bbls of produced water was released to pad surface, a vacuum truck recovered 4 bbls. Additional third party resources have been retained to assist in the remediation.

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Form C-141	State of New Mexico	Incident ID	NRM2000237294
Page 2	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	

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

#### **Initial Response**

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

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

There were no fluids released to be contained via the use of berms or dikes, absorbent pads, or other containment devices.

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

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

Printed Name: Kyle Littrell	Title: <u>SH&amp;E Supervisor</u>
Signature Allow	Date: <u>11-8-19</u>
email:Kyle_Littrell@xtoenergy.com	Telephone:
OCD Only	
Received by: <u>Ramona Marcus</u>	Date: 1/2/2020

## 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>&gt;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 <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\square$  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.

Page 3

<b>Received by OCD: 1/18/2021</b> Form C-141 Page 4	2:20:31 PM State of New Mexico Oil Conservation Divisio	on		Incident ID District RP Facility ID Application ID	Page 14 of 138 NRM2000237294
regulations all operators are re- public health or the environme failed to adequately investigate addition, OCD acceptance of a and/or regulations	ation given above is true and complete to quired to report and/or file certain release r nt. The acceptance of a C-141 report by th and remediate contamination that pose a C-141 report does not relieve the operator	notifications and he OCD does no threat to ground	d perform co ot relieve the water, surfa	prrective actions for rel e operator of liability sh ce water, human health	eases which may endanger hould their operations have h or the environment. In
Printed Name:	Kyle Littrell	Title:	<u>SH&amp;E</u>	Supervisor	
Signature:	June 0	Date:	01/18/202	1	
email: <u>Kyle_Littrel</u>	@xtoenergy.com	Tel	ephone:	(432)-221-7331	
OCD Only					
Received by:		D	ate:		-

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Oil Conservation Division

## 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.

<b>Closure Report Attachment Checklist:</b> Each of the following it	tems must be included in the closure report.						
$\square$ A scaled site and sampling diagram as described in 19.15.29.1	A scaled site and sampling diagram as described in 19.15.29.11 NMAC						
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	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	C District office must be notified 2 days prior to final sampling)						
Description of remediation activities							
and regulations all operators are required to report and/or file certai may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and ren human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regula restore, reclaim, and re-vegetate the impacted surface area to the co accordance with 19.15.29.13 NMAC including notification to the C	ations. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.						
Printed Name: Kyle Littrell	Title:SH&E Supervisor						
Printed Name:Kyle Littrell Signature:	Date: 0 <u>1/18/2021</u>						
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331						
OCD Only							
Received by:	Date:						
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.						
Closure Approved by: Karen Collins	Date: <u>4/7/2021</u>						
Printed Name: Karen Collins	Title: Environmental Scientist & Specialist						
_							

WSP USA

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

January 19, 2021

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

Re: Closure Request Remuda South 25 State 126H Incident Numbers: NRM1935840155, NRM2000235975, and NRM2000237294 Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP, formerly LT Environmental, Inc.), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Remuda South 25 State 126H (Site) in Unit G, Section 25, Township 23 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following three produced water release events at the Site. Based on field observations, excavation activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Numbers NRM1935840155, NRM2000235975, and NRM2000237294.

#### **RELEASE BACKGROUND**

On October 22, 2019, during drilling operations, a returns flow line was parted at a slip joint, resulting in the release of approximately 8.80 barrels (bbls) of produced water onto the well pad surface. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 8.0 bbls were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on Release Notification and Corrective Action Form C-141 (Form C-141) on November 6, 2019. The release was assigned Incident Number NRM1935840155.

On October 25, 2019, during drilling operations, a returns flow line was parted at a slip joint, resulting in the release of approximately 10 bbls of produced water onto the well pad surface. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 8.5 bbls were recovered. XTO reported the release to the NMOCD on a Form C-141 on November 8, 2019. The release was assigned Incident Number NRM2000235975.

On October 25, 2019, during drilling operations, a returns flow line was parted at a slip joint, resulting in the release of approximately 5.0 bbls of produced water onto the well pad surface. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 4.0 bbls

vsp

District II Page 2

were recovered. XTO reported the release to the NMOCD on a Form C-141 on November 8, 2019. The release was assigned Incident Number NRM2000237294.

#### SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321717103561001, located approximately 4,005 feet north of the Site. The water well has a depth to groundwater of approximately 50 feet bgs. The total depth of the well could not be determined. Ground surface elevation at the water well location is 3,033 feet above mean seal level (AMSL), which is approximately 31 feet lower in elevation than the Site. The associated referenced well records are included in Attachment 1.

In an effort to confirm depth to water in the area, a borehole (C-04494) was advanced 0.29 miles southwest of the Site to a depth of 105 feet bgs via sonic drill rig. The location of the borehole is provided on Figure 1. A WSP geologist logged and described soils continuously. The borehole lithologic/soil sampling log is included in Attachment 2. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. On January 8, 2021, after the 72-hour waiting period ended without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned utilizing hydrated bentonite chips.

The closest continuously flowing water or significant watercourse to the Site is a dry wash, located approximately 529 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). The Site receptors are identified on Figure 1.

#### **CLOSURE CRITERIA**

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg



District II Page 3

Chloride: 20,000 mg/kg

#### SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On February 10, 2020, WSP personnel visited the Site to evaluate the release extents based on information provided on the Form C-141s and visual observations. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positing System (GPS) unit and are presented on Figure 2. The release extents overlapped, and the final mapped extent shown on Figure 2 is the outer boundary of all releases combined. WSP personnel collected six preliminary soil samples (SS01 through SS06) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the releases. Soil was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips, respectively.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS06 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. However, additional assessment activities were warranted to further confirm the absence of impacted soil within the subsurface. Photographic documentation was conducted during the Site visit. Photographic log is included in Attachment 3.

#### **DELINEATION SOIL SAMPLING ACTIVITIES**

Further delineation and remediation efforts were postponed due to ongoing drilling operations at the well pad near the release, resulting in activity restrictions at the Site due to safety concerns. Per 19.15.29.12.B.(1) NMAC, four extensions for submission of a remediation plan or closure report were requested and approved by the NMOCD. The initial extension was requested and approved on January 16, 2020, the second was approved April 29, 2020, the third was approved September 14, 2020, and the final extension was approved November 24, 2020, extending the deadline to January 20, 2021.

On September 21, 2020, during a brief break in drilling operations, WSP personnel returned to the Site to oversee additional soil assessment activities. Five potholes (PH01 through PH05) were advanced using a track-mounted backhoe to an approximate depth of 3 feet bgs at the SS02 through SS06 preliminary soil sample locations to confirm the absence of impacted soil. One delineation soil sample was collected from each pothole PH01 through PH05, from a depth of 3

**NSD** 

District II Page 4

feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach<sup>©</sup> chloride QuanTab<sup>©</sup> test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 1.

Additionally, WSP collected four lateral delineation soil samples (SS07 through SS10) from a depth of 0.5 feet bgs around the release area, to confirm the lateral extent of the release. The potholes and delineation soil sample locations are depicted on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Xenco in Carlsbad, New Mexico.

#### **EXCAVATION ACTIVITIES**

Based on observed staining and field screening results, WSP directed excavation activities to remove discolored soil in the area around preliminary soil sample SS01. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips, respectively. The final excavation measured approximately 200 square feet and was completed to a depth of 1-foot bgs. Following removal of impacted soil, LTE collected a 5-point composite soil sample from the floor of the excavation. The 5-point composite sample was collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the sample by thoroughly mixing. One composite floor soil sample (FS01) was collected from the excavation at a depth of approximately 1-foot bgs. The excavation soil sample was collected, handled, and analyzed as described above. The excavation extent and excavation soil sample location are presented on Figure 4.

The excavation measured approximately 200 square feet in area. A total of approximately 7.5 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was backfilled immediately.

#### ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS06 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Laboratory analytical results for delineation soil samples PH01 through PH05 and SS07 through SS10 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and provide lateral and vertical delineation to below the most stringent Table 1 Closure Criteria.

Laboratory analytical results for excavation floor sample FS01 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

**NSD** 

District II Page 5

Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

#### **CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the October 22, 2019 and October 25, 2019, produced water releases. Laboratory analytical results for the preliminary, delineation, and excavation soil samples indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no further remediation was required.

Based on laboratory analytical results compliant with the Closure Criteria and confirmed depth to groundwater greater than 105 feet bgs, XTO respectfully requests NFA for Incident Numbers NRM1935840155, NRM2000235975, and NRM2000237294.

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

Sincerely,

WSP USA Inc.

Kalei Jennings

Kalei Jennings Associate Consultant, Environmental Scientist

Ashley L. Ager

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

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

Attachments:

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

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Attachment 4 Laboratory Analytical Reports

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## FIGUR



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P:XTO Energy/GIS/MXD/012919260\_REMUDA SOUTH 25 STATE 126H/012919260\_FIG02\_PRELIMINARY\_2020\_1.mxd



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P:\XTO Energy\GIS\MXD\012919260\_REMUDA SOUTH 25 STATE 126H\012919260\_FIG03\_DELINEATION\_2020.mxd



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P:\XTO Energy\GIS\MXD\012919260\_REMUDA SOUTH 25 STATE 126H\012919260\_FIG04\_EXCAVATION\_2020.mxd

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# TABLES

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#### Table 1

#### Soil Analytical Results Remuda South 25 State 126H Incident Numbers: NRM1935840155, NRM2000235975, and NRM2000237294 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Clos	ure Criteria (NMAC 1	9.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
Surface Samples										
SS01	02/10/2020	0.5	< 0.000182	< 0.000182	83.0	<50.1	<50.1	83.0	83.0	14,700
SS02	02/10/2020	0.5	< 0.00201	< 0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	4,770
SS03	02/10/2020	0.5	< 0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	4,030
SS04	02/10/2020	0.5	< 0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	4,580
SS05	02/10/2020	0.5	< 0.00202	< 0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	4,380
SS06	02/10/2020	0.5	< 0.00200	< 0.00200	76.0	<50.2	<50.2	76.0	76.0	1,950
Delineation Samples										
PH01	09/21/2020	3	< 0.00200	< 0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	30.5
PH02	09/21/2020	3	<0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	<10.0
PH03	09/21/2020	3	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	416
PH04	09/21/2020	3	< 0.00201	< 0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	<10.0
PH05	09/21/2020	3	<0.00198	< 0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	20.7
SS07	09/21/2020	0.5	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	96.2
SS08	09/22/2020	0.5	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	205
SS09	09/22/2020	0.5	< 0.00200	< 0.00200	57.1	<49.9	<49.9	57.1	57.1	494
SS10	09/21/2020	0.5	< 0.00200	< 0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	480
Excavation Samples										
FS01	09/21/2020	1	< 0.00198	< 0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	217
rt - feet/foot				ORO - motor oil rai	nge organics					

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

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

NE - Not Established

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

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#### USGS 321717103561001 23S.29E.24.41321

Eddy County, New Mexico Latitude 32°17'17", Longitude 103°56'10" NAD27 Land-surface elevation 3,034 feet above NAVD88 This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data	
Tab-separated data	
Graph of data	

Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1983-02-02		D	72019	52.17				U		
1987-10-14		D	72019	50.54				U		
1992-11-16		D	72019	54.14				S		
2003-01-29		D	72019	50.26				S	USGS	

Explanation							
Section	Code	Description					
Water-level date-time accuracy	D	Date is accurate to the Day					
Parameter code	72019	Depth to water level, feet below land surface					
Status		The reported water-level measurement represents a static level					
Method of measurement	S	Steel-tape measurement.					
Method of measurement	U	Unknown method.					
Measuring agency		Not determined					
Measuring agency	USGS	U.S. Geological Survey					
Source of measurement	А	Reported by another government agency (do not use "A" if reported by owner, use "O").					
Source of measurement	U	Source is unknown.					
Water-level approval status	А	Approved for publication Processing and review completed.					
Water-level approval status	А	Approved for publication Processing and review completed.					

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## USGS 321717103561001 23S.29E.24.41321

Available data for this site Groundwater: Field measurements 🗸

Eddy County, New Mexico Hydrologic Unit Code 13060011 Latitude 32°17'17", Longitude 103°56'10" NAD27 Land-surface elevation 3,034 feet above NAVD88 This well is completed in the Rustler Formation (312RSLR) local aquifer.

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Breaks in the plot represent a gap of at least one year between field measurements. Download a presentation-quality graph

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#### USGS 321742103552601 23S.30E.19.123421

Eddy County, New Mexico Latitude 32°17'42", Longitude 103°55'26" NAD27 Land-surface elevation 3,034 feet above NAVD88 The depth of the well is 100 feet below land surface. This well is completed in the Rustler Formation (312RSLR) local aquifer. Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1959-02-06		D	72019	78.10			Р	U		
1959-04-07		D	72019	69.30				U		
1972-09-20		D	72019	68.75				U		
1975-12-09		D	72019	68.99				U		
1976-01-15		D	72019	70.10				U		
1977-01-19		D	72019	68.40				U		
1987-10-14		D	72019	67.32				U		
1993-05-06		D	72019	66.10				S		

Explanation						
Section	Code	Description				
Water-level date-time accuracy	D	Date is accurate to the Day				
Parameter code	72019	Depth to water level, feet below land surface				
Status		The reported water-level measurement represents a static level				
Status	Р	Water level was affected by pumping at the time of the measurement				
Method of measurement	S	Steel-tape measurement.				
Method of measurement	U	Unknown method.				
Measuring agency		Not determined				

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USGS Groundwater for USA: Water Levels -- 1 sites

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Section	Code	Description
Source of measurement	U	Source is unknown.
Water-level approval status	А	Approved for publication Processing and review completed.

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## USGS 321742103552601 23S.30E.19.123421

Available data for this site Groundwater: Field measurements V GO

Eddy County, New Mexico Hydrologic Unit Code 13060011 Latitude 32°17'42", Longitude 103°55'26" NAD27 Land-surface elevation 3,034 feet above NAVD88 The depth of the well is 100 feet below land surface. This well is completed in the Rustler Formation (312RSLR) local aquifer.

#### **Output formats**

Table of data

Tab-separated data

Graph of data

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Breaks in the plot represent a gap of at least one year between field measurements. Download a presentation-quality graph

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# New Mexico Office of the State Engineer Point of Diversion Summary

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Well Tag	POD	Number	Q64 Q			-		X	Ŷ	
NA	C 0-	4326 POD14	4	2 3	23	238	29E	598191	3572765	
x Driller Lic	ense:	1664	Driller (	Compa	ny:	CA	SCADE	E DRILLING	, LP	
Driller Na	me:	CAIN, SHAWN	N.NJR.L.NEI	R						
Drill Start	Date:	05/11/2019	Drill Fin	ish Da	te:	0	5/11/201	19 <b>Plu</b>	g Date:	
Log File D	ate:	08/28/2019	PCW Ro	ev Date	:			Sou	irce:	Shallow
Pump Typ	e:		Pipe Dis	charge	Size	:		Est	imated Yield	:
Casing Siz	ze:	2.06	Depth W	Vell:		5	8 feet	De	pth Water:	54 feet
X	Wate	er Bearing Stratif	fications:	Та	p B	ottom	Descr	ription		
				2	15	54	Shale	/Mudstone/S	iltstone	
X		Casing Per	forations:	Та	p B	ottom	l			
				2	8	58				

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

1/18/21 8:51 AM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer Point of Diversion Summary

			· •	s are 1=N rs are sm			(NAD83 UTM in meters)			
Well Tag	POD	Number		16 Q4				X	Y	
NA	C 0-	4326 POD16	2	4 3	23	23S	29E	598209	3572664 🧧	
x Driller Lic	ense:	1664	Driller	Compa	ny:	CA	SCADE	DRILLING	, LP	
Driller Na	me:	CAIN, SHAWN	N.NJR.L.NE	R						
Drill Start	Date:	05/14/2019	Drill Fi	1ish Da	te:	0	5/14/201	19 <b>Plu</b>	g Date:	
Log File D	ate:	08/28/2019	PCW R	cv Date	<b>::</b>			Sou	irce:	Shallow
Pump Typ	e:		Pipe Dis	charge	e Size	:		Est	imated Yield	:
Casing Siz	ze:	2.07	Depth V	Vell:		6	4 feet	De	pth Water:	54 feet
x	Wate	er Bearing Strati	fications:	To	op B	ottom	Descr	ription		
				4	52	60	Limes	stone/Dolom	ite/Chalk	
х		Casing Per	forations:	To	op B	ottom	l			
				4	54	64				

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

1/18/21 8:52 AM

POINT OF DIVERSION SUMMARY

									BH or MW Name:	Date:	
Y					WS	PUSA			BH01 (POD 1, C-4494)		20
									,	11/18/2020-12/02/20	20
					08 West S sbad, Nev				Site Name: Remuda Frac P		
					Sbau, Nel	W WEXICO	00220		RP or Incident Number: NA WSP Job Number: TE	AB1927332462 012919195	
		L LINE CO			04445		0				
1 - 1 0		LITH(	JLUG	IC / SOIL			G		Logged By: BB, LD, FS	Method: Hollow Sterr	Auger
Lat/Lo 32.27	ong: 4194,-103.	939575			Field Scre N/A	ening:			Hole Diameter: 6.25", 4.25"	Total Depth: 56.1 Depth to Water: DRY	
	,		on Mate	erials / Comr	-				,	- spirite mater. Ditt	
Lithol	ogy and de	scriptions	only, n	o field scree	ning. Borel	nole backfi		Irill cuttings	from 56.1' to 10', hydrated be	entonite from 10' to surface.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)			Lithology/Rer	marks	Backfill / Well Completion
						1			ND w/ clay, dry brown, ned, 10% clay, some ro	poorly graded, fine oots, no stain, no odor.	10' to surface
						10	CCHE	con grav		vn-tan, poorly bund caliche pebble and nal transition, no stain,	Hydrated Bentonite Chips from 10' to s
						20	CL-S	24'-39', f plas ang		ish-brown, low onsolidated, trace sub- harp transition, no stain	
						30	LS	grav 39'-56.1' 39'-48', I wel mm stai 11/18/20 12/02/20 48'-56.1'	consolidated, some d ), sharp transition, ligh n, no odor. 020: air rotary refusal, 020: Continue drilling @ , DOLOMITE, dry, off v	tures (1-3mm). ter to 4.25". NE, dry, tan-light brown issolution features (1-3 t reaction to HCL, no TD@48' bgs. @ 48'bgs	Drill Cuttings backfilled from 56.1' to 10'
						- - - - - - 60		no (	odor. 6.1 feet bgs.		

#### Page 42 of 138

11	LITH		R	SOII Wast Tabled I Ne L SAMPI	LING LO	1 18220	BH or PH Name: Date: Date: 1-5-2021 Site Name: Remada N 25 State RP or Incident Number: WSP Job Number: TE 929(9250 TE012619 195, TE0291903 Logged By: B.B. F.S Method: Son 2
Lat/Long: 32,274 Comments:	194,-10 one hol	3.934	9575 nlefill	Field Scre NH		cutti	Hole Diameter: 6" Total Depth: 105" hos Arum 105'- 10', hydraed be around chips Rom
Moisture Content Chloride (ppm)	Vapor (ppm)		Sample #	Sample Depth (ft bgs)	1.1	Rock	Lithology/Remarks
					67 68 69	H-2	<ul> <li>A 55'</li> <li>1 /5 /2021</li> <li>55'- 65' DOLOMITE, Any, light gray-gray, well consolidated, some calcite Crystelline veins (clinn), some dissolution features (2mm) with fine calcite crystelline trace orange oxidetion staining within dissolution Receives, no steer, no oder.</li> <li>62', brain - Pale vellow rourse registelline dolomistic line stringer(2cm).</li> <li>63'-65' Abandet Calcite crystelline weins(clinn), so der.</li> <li>63'-65' Abandet Calcite crystelline weins(clinn), so ider.</li> <li>63'-65' Abandet Calcite crystelline weins(clinn), bis-15 Pale green - gray, pooly reasolidated.</li> <li>65'-69' MUDSTONE, noist, reddish brown, poorly reasolidated, high plasticity, colusive, abandut coarse crystelline system, the pale scient-gray mottling, no stain, no oder.</li> <li>65'-81.'' Gypsum we Anhydrith day, greensch fire crystelline, 20% and pale yelline, well consolidated, the crystelline, no stain, no oder.</li> </ul>

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#### Page 43 of 138

							80220	WSP Job Number: TEDIZ114220, TEDIZ19145, TEDIZ919039
at/Lon	0.	LITHO	LOGI	C / SOII	Field Scree	_	G	Logged By: BJ, FS Method: 5-4/2 Hole Diameter: 6" Total Depth: 1651
32.	27416	14,-10	3.939	1575				incening. Bunchola backfulled with didl suffings from 10'- surface.
Comme	ents: 2,7	nology 5-10	, hy	Acated	benterite	chip	s Au	10'- Surface.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)		/Rock	Lithology/Remarks
						76	GYP	The second second second
					1	77		81'-98' Mudstone, moist, dark reddish brown,
						78		moderarily consolidated, high plestery, when
					1	79		trace course crystalling sypsum inclus no stain, no other.
						80		
						81		85'- 86,5' greenish - gray well consolidate
						82	CH-S	course aystelline gypsun / any drive string
						83		90'-98' some time stain brown scond.
	and the				-	84		97, dak say-gay syssum stringer (4cm)
	13					85		98'-95' GYPSUM, dele stay - stay, some
*	-				1	86		brown, dry, well ion solidared, fine-
						87		Corre crystelline, no stain, nooder.
						88		95.5-105' SLIDY SILTSTONE, MONTH, brown,
		e.				İ		some say - due smy, porty consolid an Zoto very fine grain Fard, astain, as
					-	89		odor.
					-	90		102, think Imm) lamineted gray well consolid.
						91		shile stringer
					-	92		
					-	93		
					-	94		
						95		
						96		
1						97		
						98		
						99	GYP	
					-	- 35		

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Page 44 of 138 -OCD: 1/18/2021 Received by BH or PH Name Date: BHOl(conf) WEP USA -5-2021 Site Name: Re 1125 CAR Named Streamon Stream **RP or Incident Nr** WSP Job Number TE 012 911760, TE 012914145FE97914039 Method: Soni c LITHOLOGIC / SOIL SAMPLING LOG Logged By: 80 FS Latlong: 32.274(194),-107.939 575 Field Screening: Hole Diameter Total Depth 5 NA Comments In the loss of the sort of tield schering Barelole built lied from 105-10, he leasted benonite philos from 10- surface dall artings with Depth (ft bgs) Moisture Content Chloride (ppm) Staining Sample Vapor (ppm) Sample Lithology/Remarks Depth (ft bgs) 102', thin (Imm) In mind black/gray well 102 Consolid and shale stringer (4cm thiske) 103 103 TDC 105 655 104 105 TOELOS 106 107 108 109 110 112 113 114 115 116 117 118 119 120 121 122 123 124 125

							BH or PH Name:		Date:	
				WS	SP USA		PH01			
						track			9/21/2020	
			b Car	08 West : Isbad, Ne	Stevens S w Mexico	street 88220	Site Name: Incident Number:	Remuda S		2000235975, and NRM2
					IN INCKICC	00220	LTE Job Number:	11/17/17/1935	040100, NKIVI2	.000233975, and NKM2
	1.171.1		SIC / SOIL	SAMD		G		bor	Method:	Dealiha -
ot/Long:	LIIN	OLUG		Field Scre		9	Logged By Will Mat Hole Diameter:	IIEI	Total Depth:	Backhoe
Lat/Long:				Chloride,			Hole Diameter.		Total Depth.	
Comments:										
		1	-++			×				
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgo)	USCS/Rock Symbol	I	Lithology/R	Remarks	
<u>≤</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.3	N	<i>в</i> РН01	(tt bgs)		USU S	e grian, poorly g	graded, Br/l	Rd, some si	lt, no stain, no odo

				4:40:31 P.					BH or PH Name:		Date:	
N.					WS	SP USA			PH02			
							troot			Dominal	9/21/2020	
				5 Car	sbad Ne	Stevens S w Mexico	88220		Site Name: Incident Number:	Remuda S		2000235975, and NRM
							00220		LTE Job Number:	111/111933	0+0100, INRIVI2	2000203970, anu NRI
				GIC / SOIL	SAMPI	INGLO	G		Logged By Will Mat	her	Method:	Backhoe
_at/Lo	na:	Enn			Field Scre		0		Hole Diameter:		Total Depth:	Dackride
					Chloride,						· • • • • • • • • • • • • • • • • • • •	
Comm	ients:											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgo)	USCS/Rock Symbol			Lithology/F	Remarks	
	2,004	0.6	Z		1'					graded, Br/	Rd, some si	ilt, no stain, no oc
	1,752	0.1	N		2'	2		Same as	s Above (SAA)			
	<168	0.2	Z	PH02	3'			SAA				
					- - - - - - - - - - - - - - -	10 11 11 12						

				2:20:31 P					BH or PH Name:		Date:	Pag
					WS	SP USA			PH03		9/21/2020	
				5	08 West	Stevens S	Street		Site Name:	Remuda S		
				Car	sbad, Ne	Stevens S w Mexico	88220		Incident Number:			000235975, and NRM2
									LTE Job Number:			
		LITH	OLOG	IC / SOIL	SAMPI		G		Logged By Will Ma	ther	Method:	Backhoe
.at/Loi	na:				Field Scre		~		Hole Diameter:	-	Total Depth:	24010100
	J.				Chloride,						cim sopun	
Comm	ents:											
int	de (	or (	ng	e #	Sample	Denth	Rock ol					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft bgs)	Deptil (# h ma)	USCS/Rock Symbol			Lithology/F	Remarks	
						0						
					-							
					-							
	1,752	0.1	Ν		1'	1		sand, fir	e grian, poorly	graded, Br/	Rd, some si	lt, no stain, no odo
					-	+						
	1,640	0.3	Ν		2'	2		Same a	s Above (SAA)			
					-	+						
					-							
	509	0.1	Ν	PH03	3'	3		SAA				
					-	+						
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				<u> 2:20:31 P</u>				BH or PH Name:		Date:	P
					WS	SP USA		PH04			
				-			troot	PH04 Site Name:	Remuda S	9/21/2020	
				5 Car	sbad, Ne	Stevens S w Mexico	88220	Incident Number:			2000235975, and NR
								LTE Job Number:		- 10 100, 1414/2	
		LITH	OLOG	IC / SOIL	. SAMPL	ING LO	G	Logged By Will Mai	ther	Method:	Backhoe
Lat/Long	g:				Field Scre		-	Hole Diameter:		Total Depth:	
					Chloride,	PID					
Comme	ents:										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgo)	USCS/Rock Symbol		Lithology/F	Remarks	
	207 <168 <168	0.4 0.4 0.3	ZZZ	PH04	1' 2' 3'			e grian, poorly ( s Above (SAA)	graded, Br/	Rd, some si	ilt, no stain, no o
						6 7 8 9 10 11 11					

				4:40:31 P					BH or PH Name:		Date:	
					WS	SP USA			PH05			
							tract			Democrite	9/21/2020	
				b Car	shad Me	Stevens S w Mexico			Site Name:	Remuda S		
					sodu, ne		00220		Incident Number: LTE Job Number:	INKI/1935	040155, NRM2	2000235975, and NRM2
		1.171.14			CAMP		<u>_</u>			hor	March	
ot/1 -	o.a.	LITH	JLUG	SIC / SOIL	Field Scre		9		Logged By Will Mat	nei	Method:	Backhoe
_at/Lo	ng:				Chloride,				Hole Diameter:		Total Depth:	
Comm	ents:				ernenae,							
		or (ר	bu	e #	Sample	Depth	Rock Sol					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft bgs)	(ft bgs)	USCS/Rock Symbol			Lithology/F	Remarks	
						0						
	207	0.6	Ν		1'	1		sand, fir	e grian, poorly g	graded, Br/	Rd, some si	lt, no stain, no odc
	257	0.5	Ν		2'	2		Same as	s Above (SAA)			
	<168	0.2	Ν	PH05	3'	3		SAA				
					-	4						
					-	5						
					-							
					-	6						
					-	7						
					-	8						
					- - -	9						
					- - -	10						
					- - -	11						
					-	12						

# wsp

	PHOTOGRAPHIC LOG	
XTO Energy	Remuda South 25 State 126H	NRM1935840155
	Eddy County, New Mexico	NRM2000235975
	,	NRM2000237294

Photo No.	Date							
1	October 22, 2019	♥ WGS84 ±16R	32.27703, -103.93566		M <sup>n</sup> ±10n	3064	. <b>™</b> 19	NW304
View of re	lease on pad.	22Oct19 11 Loving, NM	13 Remuda South 25 4126H e8256, United States & 22-Oct-19 11:13	19				

Photo No.	Date	
2	February 10, 2020	
View of staining	remaining on pad.	

.

# wsp

PHOTOGRAPHIC LOG							
XTO Energy	Remuda South 25 State 126H	NRM1935840155					
	Eddy County, New Mexico	NRM2000235975					
	,,,,	NRM2000237294					



Photo No.	Date	
	September 22,	
4	2020	
View of ba	ackfill on pad.	

Released to Imaging: 4/7/2021 9:10:22 AM

# Analytical Report 652122

for LT Environmental, Inc.

**Project Manager: Dan Moir** 

Remuda South 25 #126H

#### 13-FEB-20

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)





13-FEB-20

Project Manager: Dan Moir LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 652122 Remuda South 25 #126H 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) 652122. 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. 652122 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,

Jession Vermer

Jessica Kramer **Project Assistant** 

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



# Sample Cross Reference 652122

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	02-10-20 12:25	0.5 ft	652122-001
SS02	S	02-10-20 12:30	0.5 ft	652122-002
SS03	S	02-10-20 12:35	0.5 ft	652122-003
SS04	S	02-10-20 12:40	0.5 ft	652122-004
SS05	S	02-10-20 12:45	0.5 ft	652122-005
SS06	S	02-10-20 13:05	0.5 ft	652122-006

Version: 1.%

.



#### CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Remuda South 25 #126H

Project ID: Work Order Number(s): 652122 Report Date: 13-FEB-20 Date Received: 02/12/2020

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3116351 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.





Project Id: Contact: Dan Moir Project Location:

### Certificate of Analysis Summary 652122

LT Environmental, Inc., Arvada, CO Project Name: Remuda South 25 #126H

Date Received in Lab: Wed Feb-12-20 11:57 am Report Date: 13-FEB-20 Project Manager: Jessica Kramer

	Lab Id:	652122-0	001	652122-0	002	652122-0	003	652122-	004	652122-	005	652122-	006
Analysis Requested	Field Id:	SS01		SS02		SS03		SS04		SS05		SS06	i
Analysis Kequested	Depth:	0.5- ft		0.5- f	0.5- ft			0.5- ft		0.5- f	t	0.5- ft	
	Matrix:	SOIL		SOIL	OIL SOIL		SOIL		SOIL		SOIL		
	Sampled:	Feb-10-20	12:25	Feb-10-20	Feb-10-20 12:30 Feb-10-20 12:35		Feb-10-20	12:40	Feb-10-20	12:45	Feb-10-20	13:05	
BTEX by EPA 8021B	Extracted:	Feb-12-20	12:30	Feb-12-20	12:30	Feb-12-20	12:30	Feb-12-20	12:30	Feb-12-20	12:30	Feb-12-20	12:30
	Analyzed:	Feb-12-20	16:46	Feb-12-20	17:06	Feb-12-20	18:08	Feb-12-20	18:28	Feb-12-20	18:48	Feb-12-20	19:09
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
Toluene		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
Ethylbenzene		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
m,p-Xylenes		< 0.000364	0.000364	< 0.00402	0.00402	< 0.00402	0.00402	< 0.00402	0.00402	< 0.00404	0.00404	< 0.00401	0.00401
o-Xylene		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
Total Xylenes		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
Total BTEX		< 0.000182	0.000182	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00200	0.00200
Chloride by EPA 300	Extracted:	Feb-12-20	12:30	Feb-12-20 12:30		Feb-12-20 12:30		Feb-12-20 12:30		Feb-12-20 12:30		Feb-12-20 12:30	
	Analyzed:	Feb-12-20	14:15	Feb-12-20	14:21	Feb-12-20 14:27		Feb-12-20 14:32		Feb-12-20	14:38	Feb-12-20	14:44
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		14700	504	4770	503	4030	499	4580	497	4380	502	1950	200
TPH by SW8015 Mod	Extracted:	Feb-12-20	13:00	Feb-12-20	13:00	Feb-12-20	13:00	Feb-12-20	13:00	Feb-12-20	13:00	Feb-12-20	13:00
	Analyzed:	Feb-12-20	13:35	Feb-12-20	13:55	Feb-12-20	14:15	Feb-12-20	14:15	Feb-12-20	14:35	Feb-12-20	14:35
	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	<50.3	50.3	<50.1	50.1	< 50.2	50.2	<50.0	50.0	<50.2	50.2
Diesel Range Organics (DRO)		83.0	50.1	<50.3	50.3	<50.1	50.1	< 50.2	50.2	<50.0	50.0	76.0	50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.3	50.3	<50.1	50.1	< 50.2	50.2	<50.0	50.0	<50.2	50.2
Total GRO-DRO		83.0	50.1	<50.3	50.3	<50.1	50.1	< 50.2	50.2	<50.0	50.0	76.0	50.2
Total TPH		83.0	50.1	<50.3	50.3	<50.1	50.1	<50.2	50.2	<50.0	50.0	76.0	50.2

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

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Version: 1.%

fession kenner

Jessica Kramer Project Assistant

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Final 1.000



#### LT Environmental, Inc., Arvada, CO

Chloride		16887-00-6	14700	504	mg/kg	02.12.20 14.15		50
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Seq Number:	3116355							
Analyst:	MAB		Date Prep:	02.12.20 12.30		Basis: We	t Weight	
Tech:	MAB					% Moisture:		
Analytical Me	ethod: Chloride by EPA	300				Prep Method: E30	00P	
Lab Sample I	d: 652122-001		Date Collec	cted: 02.10.20 12.25	ed: 02.10.20 12.25 Sample Depth: 0.5 ft			
Sample Id:	Sample Id: SS01 Lab Sample Id: 652122-001			Soil	Date Received:02.12.20 11.57			

Analytical Method: TPH by SW802	15 Mod				P	rep Method: SW	8015P	
Tech: DTH					9	6 Moisture:		
Analyst: DTH		Date Prep	o: 02.12	.20 13.00	E	Basis: We	t Weight	
Seq Number: 3116314								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	02.12.20 13.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	83.0	50.1		mg/kg	02.12.20 13.35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	02.12.20 13.35	U	1
Total GRO-DRO	PHC628	83.0	50.1		mg/kg	02.12.20 13.35		1
Total TPH	PHC635	83.0	50.1		mg/kg	02.12.20 13.35		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	93	%	70-135	02.12.20 13.35		
o-Terphenyl		84-15-1	99	%	70-135	02.12.20 13.35		



#### LT Environmental, Inc., Arvada, CO

Sample Id: SS01	Matrix: Soil	Date Received:02.12.20 11.57		
Lab Sample Id: 652122-001	Date Collected: 02.10.20 12.25	Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B		
Tech: MAB		% Moisture:		
Analyst: MAB	Date Prep: 02.12.20 12.30	Basis: Wet Weight		
Seq Number: 3116351				

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
Toluene	108-88-3	< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
Ethylbenzene	100-41-4	< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
m,p-Xylenes	179601-23-1	< 0.000364	0.000364		mg/kg	02.12.20 16.46	U	1
o-Xylene	95-47-6	< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
Total Xylenes	1330-20-7	< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
Total BTEX		< 0.000182	0.000182		mg/kg	02.12.20 16.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	110	%	70-130	02.12.20 16.46		
4-Bromofluorobenzene		460-00-4	96	%	70-130	02.12.20 16.46		



# **Certificate of Analytical Results 652122**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Chloride		16887-00-6	4770	503	mg/kg	02.12.20 14.21		50
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Seq Number:	3116355							
Analyst:	MAB		Date Prep:	02.12.20 12.30	]	Basis: We	t Weight	
Tech:	MAB					% Moisture:		
Analytical Me	ethod: Chloride by EP	A 300			]	Prep Method: E30	)0P	
1	d: 652122-002		Date Colle	ected: 02.10.20 12.30	:	Sample Depth: 0.5 ft		
Sample Id:	Sample Id: SS02			Soil	Date Received:02.12.20 11.57			

Analytical Method: TPH by SW801 Tech: DTH				Prep Method: SW8015P % Moisture:			
Analyst: DTH		Date Prep:	02.12.20 13.00	]	Basis: We	t Weight	
Seq Number: 3116314							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	02.12.20 13.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	02.12.20 13.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	02.12.20 13.55	U	1
Total GRO-DRO	PHC628	<50.3	50.3	mg/kg	02.12.20 13.55	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	02.12.20 13.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.12.20 13.55	
o-Terphenyl	84-15-1	97	%	70-135	02.12.20 13.55	



#### LT Environmental, Inc., Arvada, CO

Sample Id:SS02Lab Sample Id:652122-002	Matrix: Soil Date Collected: 02.10.20 12.30	Date Received:02.12.20 11.57 Sample Depth: 0.5 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:
Analyst: MAB	Date Prep: 02.12.20 12.30	Basis: Wet Weight
Seq Number: 3116351		

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	02.12.20 17.06	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	02.12.20 17.06	U	1
			%					
Surrogate		Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	111	%	70-130	02.12.20 17.06		
4-Bromofluorobenzene		460-00-4	98	%	70-130	02.12.20 17.06		



#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:SS03Lab Sample Id:652122-003	Matrix: Date Colle	Soil ected: 02.10.20 12.35		Date Received:02 Sample Depth: 0.		
Analytical Method: Chloride by EPA 300 Tech: MAB				Prep Method: E % Moisture:	300P	
Analyst: MAB Seq Number: 3116355	Date Prep	. 02.12.20 12.30		Basis: W	Vet Weight	
Parameter Ca	s Number Result	RL	Units	Analysis Date	Flag	Dil
Chloride 1688	<b>4030</b>	499	mg/kg	02.12.20 14.27		50

Analytical Method: TPH by SW801	Analytical Method: TPH by SW8015 Mod						Prep Method: SW8015P			
Tech: DTH					9	6 Moisture:				
Analyst: DTH		Date Pre	p: 02.12	.20 13.00	E	Basis: We	t Weight			
Seq Number: 3116314										
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil		
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	02.12.20 14.15	U	1		
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	02.12.20 14.15	U	1		
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	02.12.20 14.15	U	1		
Total GRO-DRO	PHC628	< 50.1	50.1		mg/kg	02.12.20 14.15	U	1		
Total TPH	PHC635	<50.1	50.1		mg/kg	02.12.20 14.15	U	1		
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag			
1-Chlorooctane		111-85-3	82	%	70-135	02.12.20 14.15				
o-Terphenyl		84-15-1	90	%	70-135	02.12.20 14.15				



#### LT Environmental, Inc., Arvada, CO

Sample Id: SS03 Lab Sample Id: 652122-003	Matrix: Soil Date Collected: 02.10.20 12.35	Date Received:02.12.20 11.57 Sample Depth: 0.5 ft			
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:			
Analyst: MAB Seq Number: 3116351	Date Prep: 02.12.20 12.30	Basis: Wet Weight			

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	02.12.20 18.08	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	02.12.20 18.08	U	1
			%					
Surrogate		Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	111	%	70-130	02.12.20 18.08		
4-Bromofluorobenzene		460-00-4	97	%	70-130	02.12.20 18.08		



#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: SS04 Lab Sample Id: 652122-004		Matrix: Date Collec	Soil cted: 02.10.20 12.40		Date Received:02. Sample Depth: 0.5		7
Analytical Method: Chloride by H	EPA 300				Prep Method: E30	)0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	02.12.20 12.30		Basis: We	t Weight	
Seq Number: 3116355							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4580	497	mg/kg	02.12.20 14.32		50

Analytical Method: TPH by SW801	5 Mod				P	Prep Method: SV	W8015P	
Tech: DTH					9	6 Moisture:		
Analyst: DTH		Date Prep	p: 02.12.	20 13.00	E	Basis: W	et Weight	
Seq Number: 3116314								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2		mg/kg	02.12.20 14.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	02.12.20 14.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	02.12.20 14.15	U	1
Total GRO-DRO	PHC628	< 50.2	50.2		mg/kg	02.12.20 14.15	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	02.12.20 14.15	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	97	%	70-135	02.12.20 14.15		

84-15-1

98

%

70-135

02.12.20 14.15

o-Terphenyl

.



#### LT Environmental, Inc., Arvada, CO

Sample Id: SS04 Lab Sample Id: 652122-004	Matrix: Soil Date Collected: 02.10.20 12.40	Date Received:02.12.20 11.57 Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B	Date Conceled. 02.10.20 12.40	Prep Method: SW5030B		
Tech: MAB		% Moisture:		
Analyst: MAB	Date Prep: 02.12.20 12.30	Basis: Wet Weight		
Seq Number: 3116351				

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	02.12.20 18.28	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	02.12.20 18.28	U	1
			%					
Surrogate		Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	111	%	70-130	02.12.20 18.28		
4-Bromofluorobenzene		460-00-4	98	%	70-130	02.12.20 18.28		



#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:         S805           Lab Sample Id:         652122-005		Matrix: Date Colle	Soil cted: 02.10.20 12.45				7
Analytical Method: Chloride by E Tech: MAB	PA 300				Prep Method: E30	00P	
Tech: MAB Analyst: MAB		Date Prep:	02.12.20 12.30		% Moisture: Basis: We	t Weight	
Seq Number: 3116355							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4380	502	mg/kg	02.12.20 14.38		50

Analytical Method: TPH by SW801		Prep Method: SW8015P						
Tech: DTH					%	6 Moisture:		
Analyst: DTH		Date Pre	p: 02.12.	20 13.00	В	asis: W	et Weight	
Seq Number: 3116314								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	02.12.20 14.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	02.12.20 14.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0		mg/kg	02.12.20 14.35	U	1
Total GRO-DRO	PHC628	<50.0	50.0		mg/kg	02.12.20 14.35	U	1
Total TPH	PHC635	<50.0	50.0		mg/kg	02.12.20 14.35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

92

97

%

%

70-135

70-135

02.12.20 14.35

02.12.20 14.35

111-85-3

84-15-1

1-Chlorooctane

o-Terphenyl



#### LT Environmental, Inc., Arvada, CO

Sample Id: SS05	Matrix: Soil	Date Received:02.12.20 11.57		
Lab Sample Id: 652122-005	Date Collected: 02.10.20 12.45	Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B		
Tech: MAB		% Moisture:		
Analyst: MAB	Date Prep: 02.12.20 12.30	Basis: Wet Weight		
Seq Number: 3116351				

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	02.12.20 18.48	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	02.12.20 18.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	111	%	70-130	02.12.20 18.48		
4-Bromofluorobenzene		460-00-4	95	%	70-130	02.12.20 18.48		



#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: <b>SS06</b> Lab Sample Id: 652122-006		Matrix: Date Collec	Soil ted: 02.10.20 13.05	Date Received:02.12.20 11. Sample Depth: 0.5 ft			7
Analytical Method: Chloride by EPA Tech: MAB	A 300				Prep Method: E30 % Moisture:	00P	
Analyst: MAB Seq Number: 3116355		Date Prep:	02.12.20 12.30		Basis: We	t Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1950	200	mg/kg	02.12.20 14.44		20

Analytical Method: TPH by SW801	5 Mod				P	rep Method: SW	8015P	
Tech: DTH					9	6 Moisture:		
Analyst: DTH		Date Prep	o: 02.12.	20 13.00	E	Basis: We	t Weight	
Seq Number: 3116314								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2		mg/kg	02.12.20 14.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	76.0	50.2		mg/kg	02.12.20 14.35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2		mg/kg	02.12.20 14.35	U	1
Total GRO-DRO	PHC628	76.0	50.2		mg/kg	02.12.20 14.35		1
Total TPH	PHC635	76.0	50.2		mg/kg	02.12.20 14.35		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	96	%	70-135	02.12.20 14.35		

97

%

84-15-1

o-Terphenyl

02.12.20 14.35

70-135



#### LT Environmental, Inc., Arvada, CO

Sample Id: SS06	Matrix: Soil	Date Received:02.12.20 11.57		
Lab Sample Id: 652122-006	Date Collected: 02.10.20 13.05	Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5030B		
Tech: MAB		% Moisture:		
Analyst: MAB	Date Prep: 02.12.20 12.30	Basis: Wet Weight		
Seq Number: 3116351				

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	02.12.20 19.09	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	02.12.20 19.09	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	111	%	70-130	02.12.20 19.09		
4-Bromofluorobenzene		460-00-4	97	%	70-130	02.12.20 19.09		



# **Flagging Criteria**

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



### LT Environmental, Inc.

Remuda South 25 #126H

Analytical Method:	Chloride by EPA	300						Prep Meth	nod: E30	00P	
Seq Number:	3116355			Matrix:	Solid			Date P		12.20	
MB Sample Id:	7696487-1-BLK		LCS Sat	mple Id:	7696487-	1-BKS		LCSD Samp	le Id: 769	6487-1-BSD	
Parameter	M Resu	-	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD RPD Lin	nit Units	Analysis Date	Fla
Chloride	<10	0 250	255	102	256	102	90-110	0 20	mg/kg	02.12.20 11:58	
Analytical Method:	=	. 300						Prep Meth			
Seq Number: Parent Sample Id:	3116355 652094-001			Matrix:	Soil 652094-0	01.5		Date P MSD Samp	-	12.20 094-001 SD	
i arent Sample id.	Paren	t Enilia	MS	MS			Limits	%RPD RPD Lin			
Parameter	Resu		Result	%Rec	MSD Result	MSD %Rec	Linits	76KFD KFD Lin	int Onits	Analysis Date	Fla
Chloride	904	.0 200	9250	105	9220	90	90-110	0 20	mg/kg	02.12.20 12:15	
Analytical Method:	=	. 300						Prep Meth		00P	
Seq Number:	3116355			Matrix:				Date P	-	12.20	
Parent Sample Id:	652112-004		MS Sai	mple Id:	652112-0	04 S		MSD Samp	le Id: 652	112-004 SD	
Parameter	Paren Resul		MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD RPD Lin	nit Units	Analysis Date	Fla
Chloride	56	5 200	763	99	764	100	90-110	0 20	mg/kg	02.12.20 13:47	
Analytical Method:	TPH by SW8015	Mod						Prep Meth	nod: SW	8015P	
Seq Number:	3116314			Matrix:	Solid			Date P		12.20	
MB Sample Id:	7696489-1-BLK		LCS Sat	mple Id:	7696489-	1-BKS		LCSD Samp	le Id: 769	6489-1-BSD	
Parameter	M Resu		LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD RPD Lin	nit Units	Analysis Date	Fla
Gasoline Range Hydrocarbo			795	80	834	83	70-135	5 35	mg/kg	02.12.20 11:36	
Diesel Range Organics (	DRO) <50	.0 1000	707	71	747	75	70-135	6 35	mg/kg	02.12.20 11:36	
Surrogate	MI %R			CS Rec	LCS Flag	LCSE %Rec			Units	Analysis Date	
1-Chlorooctane	13			117		112		70-135	%	02.12.20 11:36	
o-Terphenyl	13	0	1	100		100		70-135	%	02.12.20 11:36	

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8	015P	
Seq Number:	3116314	Matrix:	Solid	Date Prep:	02.12	2.20	
		MB Sample Id:	7696489-1-BLK				
Parameter		MB Result		U	Inits	Analysis Date	Flag
Motor Oil Range Hydrocar	bons (MRO)	<50.0		m	ıg/kg	02.12.20 11:16	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference 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 652122

#### LT Environmental, Inc.

Remuda South 25 #126H

Analytical Method:	TPH by SV	W8015 M	od						]	Prep Method	l: SW	8015P	
Seq Number:	3116314				Matrix:	Soil				Date Prep	p: 02.1	2.20	
Parent Sample Id:	652094-00	1		MS Sar	nple Id:	652094-0	01 S		Μ	SD Sample	[d: 652	094-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPI	O RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	oons (GRO)	< 50.2	1000	883	88	932	93	70-135	5	35	mg/kg	02.12.20 11:56	
Diesel Range Organics	(DRO)	< 50.2	1000	967	97	1020	102	70-135	5	35	mg/kg	02.12.20 11:56	
Surrogate					AS Rec	MS Flag	MSD %Ree		-	Limits	Units	Analysis Date	
1-Chlorooctane				1	06		112		,	70-135	%	02.12.20 11:56	
o-Terphenyl				1	01		108		,	70-135	%	02.12.20 11:56	

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>BTEX by EPA 802</b> 3116351 7696486-1-BLK	1B	LCS San	Matrix: nple Id:	Solid 7696486-	1-BKS			Prep Metho Date Pre SD Sample	p: 02.1	5030B 2.20 6486-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP	D RPD Limit	t Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.118	118	0.125	125	70-130	6	35	mg/kg	02.12.20 12:21	
Toluene	< 0.00200	0.100	0.110	110	0.116	116	70-130	5	35	mg/kg	02.12.20 12:21	
Ethylbenzene	< 0.00200	0.100	0.106	106	0.112	112	71-129	6	35	mg/kg	02.12.20 12:21	
m,p-Xylenes	< 0.00400	0.200	0.209	105	0.220	110	70-135	5	35	mg/kg	02.12.20 12:21	
o-Xylene	< 0.00200	0.100	0.104	104	0.110	110	71-133	6	35	mg/kg	02.12.20 12:21	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSD %Rec			Limits	Units	Analysis Date	
1,4-Difluorobenzene	110		1	08		108			70-130	%	02.12.20 12:21	
4-Bromofluorobenzene	96		ç	93		94			70-130	%	02.12.20 12:21	

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>BTEX by EPA 802</b> 3116351 652094-001	1B		Matrix: nple Id:	Soil 652094-00	01 S			Prep Metho Date Pre SD Sample	p: 02.1	5030B 2.20 094-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPE	ORPD Limit	t Units	Analysis Date	Flag
Benzene	< 0.00199	0.0996	0.106	106	0.125	125	70-130	16	35	mg/kg	02.12.20 13:02	
Toluene	< 0.00199	0.0996	0.111	111	0.116	116	70-130	4	35	mg/kg	02.12.20 13:02	
Ethylbenzene	< 0.00199	0.0996	0.108	108	0.112	112	71-129	4	35	mg/kg	02.12.20 13:02	
m,p-Xylenes	< 0.00398	0.199	0.190	95	0.219	110	70-135	14	35	mg/kg	02.12.20 13:02	
o-Xylene	< 0.00199	0.0996	0.102	102	0.110	110	71-133	8	35	mg/kg	02.12.20 13:02	
Surrogate				1S Rec	MS Flag	MSD %Ree		_	Limits	Units	Analysis Date	
1,4-Difluorobenzene			1	06		107		7	70-130	%	02.12.20 13:02	
4-Bromofluorobenzene			ç	95		94		7	70-130	%	02.12.20 13:02	

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

1	Palt mays	Relinquished by: (Signature)	Xenco, A minimum charge of around m	atte: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Aerico, its annexes and succession of the control 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 is 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 is 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 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.	Circle Method(s) and Meta	Total 200.7 / 6010 200.8			3055	5505	yos S	2055	2002	Ince	660	Sample Identification	Sample Custody Seals: Yes	Yes	AL NO	Temperature (°C):	SAMPLE RECEIPT	Sampler's Name: Robert McAfee	P.O. Number: Sp. 11 date	97	Project Name: Rewinda	Phone: 432.704.5178	City, State ZIP: Midland, 1X /9/US		Company Name: Li Livionina	1	ect Manager: Dan Moir	XENC
	CRIX	) Nores	Donati	elinquishment of samples of the cost of samples and sha he cost of samples and sha he cost of samples to each profe	I(s) to be analyzed	8/6020:			*						< 02/10/20	Matrix Date Sampled	NIN OLD	NIA	No	e it	Temp Blank: Kes No	ee	c 10/25/19		South 25 #1264		CUIRI	1 Shear	10	ental. Inc., Permian office		ы М
	MM	heceived by. (Digitations)	and hur (Signatura)	constitutes a valid purchase order all not assume any responsibility the act and a charge of \$5 for each sate	ICLF / SFLF OVIC.	BRCRA 13PPM Texa			4 9051	6421	0421	1235	1220	200	20 1225 0.5'	d Sampled Depth		50		Thermometer ID		Due Date:	Rusn: 5 day	Routine M	6H Turn Around		City, Otato En	City State		office Company Name:	Bill to: (if different)	Houston,TX (281) 240 Midland,TX (432-704 bbs,NM (575-392-7550) Pho <u>e</u> n
5	+ TC.11 00 1117	2 23.11 21 21 2	Date/Time	from client company to xerico, us an or any losses or expenses incurred by spie submitted to Xenco, but not analy		s 11 Al Sb As Ba Be B		all of	A X V V		-	<>	+	X	- × × ×	Numl TPH ( BTEX Chlor	EPA (EP	of C . 801 A 0=	Con (15) =802	:1)	ors					Email: dmoir@ltenv.com micatee@iterv.com		IP: Carlsbad, NM		ame: XTO-Energy	ent) Kyle Littrel	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-5334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
			Relinquished by: (Signati	y the client if such losses are due to yzed. These terms will be enforced i	listee and subcontractors. It assign	Cd Ca Cr Co Cu Fe Pb Cr Co Cu Pb Mn Mo N																			ANAL TOIS REQUEST							an Antonio, IX (210) 509-5354 Lubbock, TX (806)794-1296 770-449-8800) Tampa, FL (813-6
			ure) Received by: (Signature)	circumstances beyond the control unless previously negotiated.	is standard terms and conditions	I SIO2																					Deliverables: EDD ADaPT	Reporting:Level II evel III ST/UST	State of Project:	Program: UST/PST PRP Brownfields		W
			e) Date/Time			Na Sr H Sn U V Zn 1631/245.1/7470/7471:Hg				•					discrete	Sample Comments		lab, if received by 4:30pm	TAT starts the day recevied by the							Work Order Notes	Other:	ST RRP bvel IV	1	IdsRCuperfund	lents	Page of

Released to Imaging: 4/7/2021 9:10:22 AM

## **XENCO** Laboratories

#### Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.	Acceptable Temperature Range: 0 - 6 degC
Date/ Time Received: 02.12.2020 11.57.00 AM	Air and Metal samples Acceptable Range: Ambient
Work Order #: 652122	Temperature Measuring device used : T-NM-007
Sample Recei	ot Checklist Comments
#1 *Temperature of cooler(s)?	.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Elizabeth McClellan
Checklist reviewed by: Jessica Vramer

Date: 02.12.2020

Jessica Kramer

Date: 02.12.2020

🔅 eurofins

Project Id:

**Project Location:** 

**Contact:** 

Environment Testing Xenco

012919260

Dan Moir

Eddy County

## Certificate of Analysis Summary 673152

LT Environmental, Inc., Arvada, CO

#### Project Name: Remuda South 25 #126H

 Date Received in Lab:
 Mon 09.21.2020 16:31

 Report Date:
 09.23.2020 14:07

Project Manager: Jessica Kramer

	Lab Id:	673152-0	01	673152-0	02	673152-0	003	673152-0	004	673152-0	005	673152-0	06
Analysis Requested	Field Id:	PH01		PH02		PH03		PH04		PH05		FS01	
Anulysis Requested	Depth:	3- ft											
	Matrix:	SOIL											
	Sampled:	09.21.2020	13:20	09.21.2020	13:29	09.21.2020	10:59	09.21.2020	12:10	09.21.2020	12:29	09.21.2020	14:46
BTEX by EPA 8021B	Extracted:	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06
	Analyzed:	09.21.2020	18:43	09.21.2020	19:05	09.21.2020	19:28	09.21.2020	19:50	09.21.2020	20:13	09.21.2020	20:35
	Units/RL:	mg/kg	RL										
Benzene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
Toluene		< 0.00200	0.00200	<0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
Ethylbenzene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
m,p-Xylenes		< 0.00400	0.00400	<0.00398	0.00398	< 0.00399	0.00399	< 0.00402	0.00402	<0.00396	0.00396	< 0.00396	0.00396
o-Xylene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
Total Xylenes		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
Total BTEX		< 0.00200	0.00200	<0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	<0.00198	0.00198	< 0.00198	0.00198
Chloride by EPA 300	Extracted:	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23
	Analyzed:	09.22.2020	11:55	09.22.2020	12:22	09.22.2020	12:28	09.22.2020	12:33	09.22.2020	12:39	09.22.2020	12:44
	Units/RL:	mg/kg	RL										
Chloride		30.5	9.92	<10.0	10.0	416	10.0	<10.0	10.0	20.7	9.98	217	9.94
TPH by SW8015 Mod	Extracted:	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50
	Analyzed:	09.21.2020	18:39	09.21.2020	18:59	09.21.2020	19:19	09.21.2020	19:40	09.21.2020	20:00	09.21.2020	20:20
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Total TPH		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1

BRL - Below Reporting Limit

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

Jession Vramer

Page 1 of 22

Environment Testing Xenco

# Analytical Report 673152

for

## LT Environmental, Inc.

**Project Manager: Dan Moir** 

Remuda South 25 #126H

012919260

09.23.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)

09.23.2020

Project Manager: **Dan Moir LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **673152 Remuda South 25 #126H** Project Address: Eddy County

#### Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673152. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673152 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

fession kenner

Jessica Kramer Project Manager

A Small Business and Minority Company

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

eurofins Environment Testing Xenco

# Sample Cross Reference 673152

Remuda South 25 #126H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	09.21.2020 13:20	3 ft	673152-001
PH02	S	09.21.2020 13:29	3 ft	673152-002
PH03	S	09.21.2020 10:59	3 ft	673152-003
PH04	S	09.21.2020 12:10	3 ft	673152-004
PH05	S	09.21.2020 12:29	3 ft	673152-005
FS01	S	09.21.2020 14:46	3 ft	673152-006

Environment Testing Xenco

#### **CASE NARRATIVE**

Client Name: LT Environmental, Inc. Project Name: Remuda South 25 #126H

 Project ID:
 012919260

 Work Order Number(s):
 673152

 Report Date:
 09.23.2020

 Date Received:
 09.21.2020

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Seq Number: 3137717

# **Certificate of Analytical Results 673152**

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample	<b>PH01</b> Id: 673152-001		Matrix: Date Collec	Soil cted: 09.21.2020 13:20		Date Received:09 Sample Depth: 3 f		:31
Analytical M Tech: Analyst: Seq Number	lethod: Chloride by E MAB MAB : 3137776	PA 300	Date Prep:	09.22.2020 09:23		Prep Method: E3 % Moisture: Basis: W	600P et Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	30.5	9.92	mg/kg	09.22.2020 11:55		1
Analytical M Tech:	lethod: TPH by SW80 DTH	)15 Mod				Prep Method: SV % Moisture:	V8015P	

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Total GRO-DRO	PHC628	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Total TPH	PHC635	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	100	%	70-135	09.21.2020 18:39		
o-Terphenyl		84-15-1	93	%	70-135	09.21.2020 18:39		

# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:PH01Lab Sample Id:673152-001	Matrix: Soil Date Collected: 09.21.2020 13:20	Date Received:09.21.2020 16:31 Sample Depth: 3 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5035A % Moisture:
Analyst:MABSeq Number:3137712	Date Prep: 09.21.2020 17:06	Basis: Wet Weight

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	09.21.2020 18:43	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	87	%	70-130	09.21.2020 18:43		
1,4-Difluorobenzene		540-36-3	99	%	70-130	09.21.2020 18:43		

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# **Certificate of Analytical Results 673152**

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: <b>PH02</b> Lab Sample Id: 673152-002		Matrix: Date Colle	Soil ected: 09.21.2020 13:29		Date Received Sample Depth:		20 16:31
Analytical Method: Chloride by EPA Tech: MAB Analyst: MAB Seq Number: 3137776	A 300	Date Prep	: 09.22.2020 09:23		Prep Method: % Moisture: Basis:	E300P Wet Weig	ght
Parameter	Cas Number	Result	RL	Units	Analysis Da	ite Fla	ag Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.22.2020 12	::22 U	1

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09	9.21.2020 16:50		Basis: W	/et Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 18:59	9 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 18:59	9 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 18:59	9 U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 18:59	9 U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 18:59	9 U	1
Surrogate		Cas Number	% Recover	y Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	97	%	70-135	09.21.2020 18	:59	
o-Terphenyl		84-15-1	92	%	70-135	09.21.2020 18	:59	

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id: Lab Sample Id	<b>PH02</b> 1: 673152-002	Matrix: Date Collected	Soil l: 09.21.2020 13:29	Date Received:09.21.2020 16:31 Sample Depth: 3 ft			
Analytical Me Tech:	thod: BTEX by EPA 8021B MAB			Prep Method: % Moisture:	SW5035A		
Analyst: Seq Number:	MAB 3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight		

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	09.21.2020 19:05	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	101	%	70-130	09.21.2020 19:05		
4-Bromofluorobenzene		460-00-4	92	%	70-130	09.21.2020 19:05		

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# **Certificate of Analytical Results 673152**

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:PH03Lab Sample Id:673152-003		Matrix: Date Colle	Soil ected: 09.21.2020 10:59		Date Received:09.2 Sample Depth: 3 ft	21.2020 16	5:31
Analytical Method: Chlorid Tech: MAB Analyst: MAB Seq Number: 3137776	e by EPA 300	Date Prep:	09.22.2020 09:23		Prep Method: E30 % Moisture: Basis: Wet	0P Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	416	10.0	mg/kg	09.22.2020 12:28		1

	0 11200					i tep titetitotit b		
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09.	21.2020 16:50		Basis: W	et Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 19:19	) U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 19:19	) U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 19:19	) U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 19:19	) U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 19:19	) U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	96	%	70-135	09.21.2020 19	:19	
o-Terphenyl		84-15-1	93	%	70-135	09.21.2020 19	:19	

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id:	<b>PH03</b>	Matrix:	Soil	Date Received	1:09.21.2020 16:31
Lab Sample Id	d: 673152-003	Date Collected	1: 09.21.2020 10:59	Sample Depth	:: 3 ft
Analytical Me Tech: Analyst: Seq Number:	ethod: BTEX by EPA 8021B MAB MAB 3137712	Date Prep:	09.21.2020 17:06	Prep Method: % Moisture: Basis:	SW5035A Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	09.21.2020 19:28	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	09.21.2020 19:28		
4-Bromofluorobenzene		460-00-4	90	%	70-130	09.21.2020 19:28		

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# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample	<b>PH04</b> Id: 673152-004		Matrix: Date Co	Soil llected: 09.2	1.2020 12:10		Received:09.2 ble Depth: 3 ft	1.2020 16	:31
Analytical M Tech:	ethod: Chloride by E MAB	PA 300				-	Method: E30	0P	
Analyst:	MAB		Date Pre	ep: 09.22	2.2020 09:23	Basis		Weight	
Seq Number:	3137776								
Parameter		Cas Number	Result	RL	Un	its A	nalysis Date	Flag	Dil
Chloride		16887-00-6	<10.0	10.0	mg/	/kg 09.2	22.2020 12:33	U	1

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	SW8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 0	9.21.2020 16:50		Basis: V	Wet Weight	
Seq Number: 3137717								
Parameter	Cas Number	r Result	RL		Units	Analysis Date	e Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Total GRO-DRO	PHC628	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Total TPH	PHC635	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Surrogate		Cas Number	% Recove	ry Units	Limits	Analysis Da	ate Flag	
1-Chlorooctane		111-85-3	94	%	70-135	09.21.2020 19	9:40	
o-Terphenyl		84-15-1	89	%	70-135	09.21.2020 19	9:40	

# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:	<b>PH04</b>	Matrix:	Soil	Date Received:09.21.2020 16:31			
Lab Sample Id:	673152-004	Date Collected	: 09.21.2020 12:10	Sample Depth: 3 ft			
Tech: N	od: BTEX by EPA 8021B MAB MAB 8137712	Date Prep:	09.21.2020 17:06	Prep Method: % Moisture: Basis:	SW5035A Wet Weight		

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	09.21.2020 19:50	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	101	%	70-130	09.21.2020 19:50		
4-Bromofluorobenzene		460-00-4	91	%	70-130	09.21.2020 19:50		

# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample Id	<b>PH05</b> d: 673152-005		Matrix: Date Coll		Soil 09.21.2020 12:29		Date Received Sample Depth		1.2020 16:	31
2	ethod: Chloride by EPA	. 300					Prep Method:	E300	)P	
Tech:	MAB						% Moisture:			
Analyst:	MAB		Date Prep	<b>)</b> :	09.22.2020 09:23		Basis:	Wet	Weight	
Seq Number:	3137776									
Parameter		Cas Number	Result	RL		Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	20.7	9.9	98	mg/kg	09.22.2020 12	2:39		1

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 0	9.21.2020 16:50		Basis: V	Vet Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 20:0	0 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 20:0	0 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 20:0	0 U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 20:0	0 U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 20:0	0 U	1
Surrogate		Cas Number	% Recover	ry Units	Limits	Analysis Da	ite Flag	
1-Chlorooctane		111-85-3	95	%	70-135	09.21.2020 20	):00	
o-Terphenyl		84-15-1	90	%	70-135	09.21.2020 20	):00	

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id:         PH05           Lab Sample Id:         673152-005	Matrix: Date Collected	Soil 1: 09.21.2020 12:29	Date Received:09.21.2020 16:31 Sample Depth: 3 ft			
Analytical Method: BTEX by El Tech: MAB	PA 8021B		Prep Method: % Moisture:	SW5035A		
Analyst: MAB Seq Number: 3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight		

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	09.21.2020 20:13	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	94	%	70-130	09.21.2020 20:13		
1,4-Difluorobenzene		540-36-3	88	%	70-130	09.21.2020 20:13		

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# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
3137776								
MAB		Date Pre	p: 09.22.2020 09:23		Basis:	Wet	Weight	
MAB					% Moisture:			
ethod: Chloride by EPA	300				Prep Method:	E300	Р	
d: 673152-006		Date Col	lected: 09.21.2020 14:46		Sample Depth	: 3 ft		
FS01		Matrix:	Soil		Date Received	1:09.21	.2020 16:	31
	d: 673152-006 ethod: Chloride by EPA MAB MAB	d: 673152-006 ethod: Chloride by EPA 300 MAB MAB	d: 673152-006Date Colethod: Chloride by EPA 300MABMABDate Pre	d: 673152-006       Date Collected: 09.21.2020 14:46         ethod: Chloride by EPA 300       MAB         MAB       Date Prep: 09.22.2020 09:23	d: 673152-006       Date Collected: 09.21.2020 14:46         ethod: Chloride by EPA 300       MAB         MAB       Date Prep: 09.22.2020 09:23	d: 673152-006Date Collected: 09.21.2020 14:46Sample Depthethod: Chloride by EPA 300Prep Method:MAB% Moisture:MABDate Prep: 09.22.2020 09:23Basis:	d: 673152-006Date Collected: 09.21.2020 14:46Sample Depth: 3 ftethod: Chloride by EPA 300Prep Method: E300MAB% Moisture:MABDate Prep: 09.22.2020 09:23Basis: Wet Y	Date Collected: 09.21.2020 14:46Sample Depth: 3 ftethod: Chloride by EPA 300Prep Method: E300PMAB% Moisture:MABDate Prep: 09.22.2020 09:23Basis:Wet Weight

Analytical Method: TPH by SW802	15 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09	.21.2020 16:50		Basis: W	/et Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 20:20	) U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 20:20	) U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 20:20	) U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 20:20	) U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 20:20	) U	1
Surrogate		Cas Number	% Recovery	y Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	93	%	70-135	09.21.2020 20	:20	
o-Terphenyl		84-15-1	86	%	70-135	09.21.2020 20	:20	

# **Certificate of Analytical Results 673152**

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:         FS01           Lab Sample Id:         673152-006	Matrix:	Soil	Date Received:09.21.2020 16:31			
	Date Collect	ed: 09.21.2020 14:46	Sample Depth: 3 ft			
Analytical Method:BTEX by EPA 8021BTech:MABAnalyst:MABSeq Number:3137712	Date Prep:	09.21.2020 17:06	Prep Method % Moisture: Basis:	l: SW5035A Wet Weight		

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	09.21.2020 20:35	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	99	%	70-130	09.21.2020 20:35		
4-Bromofluorobenzene		460-00-4	88	%	70-130	09.21.2020 20:35		

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# **Flagging Criteria**

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

\*\* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.	ND Not Detected								
RL Reporting Limit									
MDL Method Detection Limit	DL Method Detection Limit         SDL         Sample Detection Limit         LOD Limit of Detection								
PQL Practical Quantitation Limit	QL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation								
DL Method Detection Limit	Method Detection Limit								
NC Non-Calculable									
SMP Client Sample		BLK	Method Blank						
BKS/LCS Blank Spike/Laboratory	Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate					
MD/SD Method Duplicate/Sam	ple Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate					
+ NELAC certification not offered	l for this compound.								

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

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QC Summary 673152

#### LT Environmental, Inc.

Remuda South 25 #126H

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by</b> 3137776 7711799-1-1		)0		Matrix: nple Id:	Solid 7711799-	1-BKS			rep Meth Date Pr D Sampl	rep: 09.2	00P 22.2020 1799-1-BSD	
Parameter		MB	Spike	LCS Description		LCSD	LCSD	Limits	%RPD	RPD	Units	Analysis Date	Flag
Chloride		<b>Result</b> <10.0	Amount 250	Result 252	<b>%Rec</b> 101	Result 253	<b>%Rec</b> 101	90-110	0	Limit 20	mg/kg	09.22.2020 10:01	
Analytical Method: Seq Number:	3137776		)0		Matrix:					rep Meth Date Pr	rep: 09.2	22.2020	
Parent Sample Id:	673152-001				-	673152-0				•		152-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		30.5	199	231	101	234	102	90-110	1	20	mg/kg	09.22.2020 12:00	
Angletical Mathed	Chlorida ha		20						D	nen Mede	od: E30	10 P	
Analytical Method: Seq Number:	3137776	y EPA 30	0		Matrix:	Soil			P	rep Meth Date Pr		22.2020	
Parent Sample Id:	673161-001					673161-0	01 S		MS		-	161-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		385	198	602	110	587	100	90-110	3	20	mg/kg	09.22.2020 10:20	
<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>TPH by SW</b> 3137717 7711777-1-1		od		Matrix: nple Id:	Solid 7711777-	1-BKS			rep Meth Date Pr D Sampl	rep: 09.2	8015P 21.2020 1777-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	<50.0	1000	848	85	811	81	70-135	4	35	mg/kg	09.21.2020 12:16	
Diesel Range Organics	(DRO)	<50.0	1000	872	87	832	83	70-135	5	35	mg/kg	09.21.2020 12:16	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re			imits	Units	Analysis Date	
1-Chlorooctane		88			94		93			-135	%	09.21.2020 12:16	
o-Terphenyl		84		8	83		80		70	-135	%	09.21.2020 12:16	
<b>Analytical Method:</b> Seq Number:	<b>TPH by SW</b> 3137717	V8015 M	od		Matrix: nple Id:	Solid 7711777-	1-BLK		P	rep Meth Date Pr		8015P 21.2020	
Parameter				MB Posult							Units	Analysis	Flag
Motor Oil Range Hydrocar	bons (MRO)			<b>Result</b> <50.0							mg/kg	<b>Date</b> 09.21.2020 11:56	

MS/MSD Percent Recovery

Relative Percent Difference LCS/LCSD Recovery Log Difference  $\begin{array}{l} [D] = 100*(C-A) \ / \ B \\ RPD = 200* \ | \ (C-E) \ / \ (C+E) \ | \\ [D] = 100*(C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

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

.

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Xenco

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QC Summary 673152

Prep Method: SW8015P

#### LT Environmental, Inc.

Remuda South 25 #126H

**Environment Testing** 

Seq Number:	3137717	3137717 Matrix					Soil Date Prep: 09.21.2020					21.2020	
Parent Sample Id:	673097-001	l		MS San	nple Id:	673097-00	01 S		MS	D Sample	e Id: 673	097-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarl	oons (GRO)	< 50.1	1000	852	85	846	85	70-135	1	35	mg/kg	09.21.2020 13:17	
Diesel Range Organics	(DRO)	68.8	1000	948	88	964	90	70-135	2	35	mg/kg	09.21.2020 13:17	
Surrogate					IS Rec	MS Flag	MSI %Re			imits	Units	Analysis Date	
1-Chlorooctane				1	08		107	7	70	-135	%	09.21.2020 13:17	
o-Terphenyl				9	03		93		70	-135	%	09.21.2020 13:17	

Analytical Method:	BTEX by EPA 8021	TEX by EPA 8021B								Prep Method: SW5035A				
Seq Number:	3137712		]	Matrix:	:: Solid				Date Prep: 09.21.2020					
MB Sample Id:	7711754-1-BLK		LCS Sample Id: 7711754-1-BKS			I-BKS	LCSD Sample Id: 7711754-1-BS							
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	0.0978	98	0.104	104	70-130	6	35	mg/kg	09.21.2020 11:38			
Toluene	< 0.00200	0.100	0.0948	95	0.101	101	70-130	6	35	mg/kg	09.21.2020 11:38			
Ethylbenzene	< 0.00200	0.100	0.0885	89	0.0941	94	71-129	6	35	mg/kg	09.21.2020 11:38			
m,p-Xylenes	< 0.00400	0.200	0.179	90	0.191	96	70-135	6	35	mg/kg	09.21.2020 11:38			
o-Xylene	< 0.00200	0.100	0.0873	87	0.0933	93	71-133	7	35	mg/kg	09.21.2020 11:38			
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re			imits	Units	Analysis Date			
1,4-Difluorobenzene	100		9	9		99		70	-130	%	09.21.2020 11:38			
4-Bromofluorobenzene	86		8	89		93		70	-130	%	09.21.2020 11:38			

Analytical Method:	BTEX by EPA 8021	В						P	rep Metho	od: SW	5035A	
Seq Number:	3137712		]	Matrix:	Soil				Date Pr	ep: 09.2	21.2020	
Parent Sample Id:	673097-001		MS San	nple Id:	673097-00	01 S		MS	D Sample	e Id: 673	097-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.121	120	0.122	121	70-130	1	35	mg/kg	09.21.2020 12:23	
Toluene	< 0.00201	0.101	0.111	110	0.127	126	70-130	13	35	mg/kg	09.21.2020 12:23	
Ethylbenzene	< 0.00201	0.101	0.0935	93	0.118	117	71-129	23	35	mg/kg	09.21.2020 12:23	
m,p-Xylenes	< 0.00402	0.201	0.187	93	0.238	118	70-135	24	35	mg/kg	09.21.2020 12:23	
o-Xylene	< 0.00201	0.101	0.0916	91	0.116	115	71-133	24	35	mg/kg	09.21.2020 12:23	
Surrogate				IS Rec	MS Flag	MSD %Re			imits	Units	Analysis Date	

Surrogate	%Rec	Flag	%Rec	Flag		Date
1,4-Difluorobenzene	100		98	70-130	%	09.21.2020 12:23
4-Bromofluorobenzene	92		85	70-130	%	09.21.2020 12:23

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-}A) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-}E) \ / \ (C\text{+}E) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

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

NY'	BOR ATORIES	Hobbs,NM (	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock, 575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-88	00 Dallas,TX (214) 902-0300 San Antonio, 40) EL Paso,TX (915)585-3443 Lubbock,T Z (480-355-0900) Atlanta,GA (770-449-88	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	620-2000) www.xenco.com Page 1 of	Page 1
Project Manager: D	Dan Moir		Bill to: (if different)	Kyle Littrell	,	W	Page
-	LT Environmental, Inc.	., Permian office	Company Name:	-			
	3300 North A Street		Address:			State of Project:	elds IRC Derfund
City, State ZIP: M	Midland, Tx 79705		City, State ZIP:				
Phone: (4	(432) 236-3849		Email: wmather@ltenv.com, dmoir@ltenv.com	com, dmoir@ltenv.cc	om	Deliverables: EDD ADaPT	
Project Name:	Remuda South 25 #126H		Turn Around		ANAI YSIS REDITEST		Water
Project Number:	//12919260		Routine P				WOIN OTHER NOTES
P.O. Number:	Eddy						
Sampler's Name:	William Mather		Due Date:				
SAMPLE RECEIPT	-	W No W	Wet Ice: Yas No				
Temperature (°C):	1.t		110				
Received Intact:	-	T-NM DI	ē	1)			
Cooler Custody Seals:	り	Correction Factor:	6.0	5)			
Sample Custody Seals:	No	Total Containers:	6	A 801 PA 0=			TAT starts the day recevied by the
Sample Identification	cation Matrix	Date Time Sampled Sampled	e Depth Numbe	TPH (EP, BTEX (El Chloride			Sample Comments
PH01	s	9/21/2020 13:20	3 <sup>i</sup>	××			2
PH02	s	9/21/2020 13:29		x x			Discrete
PH03	s	9/21/2020 10:59		××			Discrete
PH04	s	9/21/2020 12:10	0 3' 1	×			Discrete
PH05	s		9 3' 1	×			Discrete
FS01	s	9/21/2020 14:46	6 1' 1	×			Discrete
1							Composite
	20	12/					
		2	9				
Total 200.7 / 6010 Circle Method(s) ar	Fotal     200.7 / 6010     200.8 / 6020:       Circle     Method(s) and Metal(s) to be analyzed	8RCRA lyzed TCLP /	RCRA 13PPM Texas 11 / TCLP / SPLP 6010: 8RCRA	Al Sb As Ba Be A Sb As Ba Be C	B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo I Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U	lg SiO2	SiO2 Na Sr TI Sn U V Zn 1631/2451/7470/7474-14
tice: Signature of this docum ervice. Xenco will be liable (enco. A minimum charge of	nent and relinquishment of only for the cost of sample of \$75.00 will be applied to e	samples constitutes a va s and shall not assume a ach project and a charge	lid purchase order from clie ny responsibility for any los of \$5 for each sample subn	nt company to Xenco, its ises or expenses incurrec nitted to Xenco, but not ar		-	
Relinquished by: (Signature	gpature)	Received by: (Sigr	(Signature)	Date/Time	Relinquished by: (Signature)	Received by (Signature)	
Mr m	R C	be Cathere		31	2		
		- 1			4		

Released to Imaging: 4/7/2021 9:10:22 AM

Final 1.000

## **Eurofins Xenco, LLC**

## Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.	Acceptable Temperature F	Range: 0 - 6 degC
Date/ Time Received: 09.21.2020 04.31.00 PM	Air and Metal samples Acc	ceptable Range: Ambient
Work Order #: 673152	Temperature Measuring de	evice used: T_NM_007
Sample Rec	eipt Checklist	Comments
#1 *Temperature of cooler(s)?	7.4	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?	Yes	
#6*Custody Seals Signed and dated?	Yes	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	Samples received in bulk containers.
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	No	
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Date: 09.21.2020

Checklist reviewed by: Jessica Wramer

Date: 09.23.2020

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Environment Testing Xenco

Project Id:012919260Contact:Dan MoirDan MoirDan Moir

Project Location: Eddy County

## Certificate of Analysis Summary 673152

LT Environmental, Inc., Arvada, CO

Project Name: Remuda South 25 #126H

 Date Received in Lab:
 Mon 09.21.2020 16:31

 Report Date:
 09.24.2020 08:02

Project Manager: Jessica Kramer

	Lab Id:	673152-0	01	673152-0	02	673152-0	003	673152-	004	673152-0	05	673152-0	06
Analysis Requested	Field Id:	PH01		PH02		PH03		PH04		PH05		FS01	
Analysis Kequesieu	Depth:	3- ft		1- ft									
	Matrix:	SOIL		SOIL		SOIL	,	SOIL		SOIL		SOIL	
	Sampled:	09.21.2020	13:20	09.21.2020	13:29	09.21.2020	10:59	09.21.2020	12:10	09.21.2020	12:29	09.21.2020	14:46
BTEX by EPA 8021B	Extracted:	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06	09.21.2020	17:06
	Analyzed:	09.21.2020	18:43	09.21.2020	19:05	09.21.2020	19:28	09.21.2020	19:50	09.21.2020	20:13	09.21.2020	20:35
	Units/RL:	mg/kg	RL										
Benzene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
Toluene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
Ethylbenzene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
m,p-Xylenes		< 0.00400	0.00400	< 0.00398	0.00398	< 0.00399	0.00399	< 0.00402	0.00402	< 0.00396	0.00396	< 0.00396	0.00396
o-Xylene		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
Total Xylenes		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
Total BTEX		< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00198	0.00198
Chloride by EPA 300	Extracted:	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23	09.22.2020	09:23
	Analyzed:	09.22.2020	11:55	09.22.2020	12:22	09.22.2020	12:28	09.22.2020	12:33	09.22.2020	12:39	09.22.2020	12:44
	Units/RL:	mg/kg	RL										
Chloride		30.5	9.92	<10.0	10.0	416	10.0	<10.0	10.0	20.7	9.98	217	9.94
TPH by SW8015 Mod	Extracted:	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50	09.21.2020	16:50
	Analyzed:	09.21.2020	18:39	09.21.2020	18:59	09.21.2020	19:19	09.21.2020	19:40	09.21.2020	20:00	09.21.2020	20:20
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	< 50.1	50.1	< 50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Total GRO-DRO		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1
Total TPH		<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.1	50.1

BRL - Below Reporting Limit

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

Jession Vramer

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Environment Testing Xenco

# Analytical Report 673152

for

## LT Environmental, Inc.

**Project Manager: Dan Moir** 

Remuda South 25 #126H

012919260

09.24.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins Environment Testing Xenco

09.24.2020

Project Manager: **Dan Moir LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 673152 Remuda South 25 #126H Project Address: Eddy County

#### Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673152. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673152 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

fession kenner

Jessica Kramer Project Manager

A Small Business and Minority Company

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

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eurofins Environment Testing Xenco

## Sample Cross Reference 673152

Remuda South 25 #126H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	09.21.2020 13:20	3 ft	673152-001
PH02	S	09.21.2020 13:29	3 ft	673152-002
PH03	S	09.21.2020 10:59	3 ft	673152-003
PH04	S	09.21.2020 12:10	3 ft	673152-004
PH05	S	09.21.2020 12:29	3 ft	673152-005
FS01	S	09.21.2020 14:46	1 ft	673152-006

Environment Testing Xenco

#### **CASE NARRATIVE**

Client Name: LT Environmental, Inc. Project Name: Remuda South 25 #126H

 Project ID:
 012919260

 Work Order Number(s):
 673152

 Report Date:
 09.24.2020

 Date Received:
 09.21.2020

Sample receipt non conformances and comments:

V1.001 Revision - Corrected sample depth on FS01 to 1'

Sample receipt non conformances and comments per sample:

None

Seq Number: 3137717

# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample	<b>PH01</b> Id: 673152-001		Matrix: Date Collec	Soil cted: 09.21.2020 13:20		Date Received:09 Sample Depth: 3 f		:31
Analytical M Tech: Analyst: Seq Number	lethod: Chloride by E MAB MAB : 3137776	PA 300	Date Prep:	09.22.2020 09:23		Prep Method: E3 % Moisture: Basis: W	600P et Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	30.5	9.92	mg/kg	09.22.2020 11:55		1
Analytical M Tech:	lethod: TPH by SW80 DTH	)15 Mod				Prep Method: SV % Moisture:	V8015P	

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Total GRO-DRO	PHC628	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Total TPH	PHC635	<50.2	50.2		mg/kg	09.21.2020 18:39	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	100	%	70-135	09.21.2020 18:39		
o-Terphenyl		84-15-1	93	%	70-135	09.21.2020 18:39		

# Certificate of Analytical Results 673152

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:PH01Lab Sample Id:673152-001	Matrix:	Soil	Date Receiv	ved:09.21.2020 16:31
	Date Collecte	ed: 09.21.2020 13:20	Sample Dep	pth: 3 ft
Analytical Method:BTEX by EPA 8021BTech:MABAnalyst:MABSeq Number:3137712	Date Prep:	09.21.2020 17:06	Prep Metho % Moisture Basis:	od: SW5035A e: Wet Weight

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	09.21.2020 18:43	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.21.2020 18:43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	87	%	70-130	09.21.2020 18:43		
1,4-Difluorobenzene		540-36-3	99	%	70-130	09.21.2020 18:43		

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id:PH02Lab Sample Id:673152-002		Matrix: Date Colle	Soil ected: 09.21.2020 13:29		Date Received Sample Depth	 .2020 16:	31
Analytical Method: Chloride by EPA 3 Tech: MAB Analyst: MAB Sea Number: 3137776	00	Date Prep	: 09.22.2020 09:23		Prep Method: % Moisture: Basis:	P Weight	
Parameter	Cas Number 16887-00-6	Result <10.0	<b>RL</b>	Units mg/kg	<b>Analysis Da</b> 09.22.2020 12	<b>Flag</b> U	<b>Dil</b>

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09.2	21.2020 16:50		Basis: W	et Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 18:59	) U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 18:59	) U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 18:59	) U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 18:59	) U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 18:59	) U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	97	%	70-135	09.21.2020 18	59	
o-Terphenyl		84-15-1	92	%	70-135	09.21.2020 18	59	

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# Certificate of Analytical Results 673152

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:PH02Lab Sample Id:673152-002		Matrix: Soil Date Collected: 09.21.2020 13:29		Date Received:09.21.2020 16:31 Sample Depth: 3 ft		
2	nod: BTEX by EPA 8021B MAB			Prep Method: % Moisture:	SW5035A	
Analyst: 1 Seq Number: 3	MAB 3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight	

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	09.21.2020 19:05	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	09.21.2020 19:05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	101	%	70-130	09.21.2020 19:05		
4-Bromofluorobenzene		460-00-4	92	%	70-130	09.21.2020 19:05		

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#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:PH03Lab Sample Id:67315		Matrix: Date Colle	Soil ected: 09.21.2020 10:59	Date Received:09.21.2020 16:31 Sample Depth: 3 ft			
Analytical Method: C Tech: MAB Analyst: MAB Seq Number: 313777		Date Prep:	09.22.2020 09:23		Prep Method: E30 % Moisture: Basis: We	0P t Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	416	10.0	mg/kg	09.22.2020 12:28		1
Analytical Method: T	PH by SW8015 Mod				Prep Method: SW	8015P	

Analytical Method: TPH by SW8015 Mod Tech: DTH					1	w 8015P	
		00.2	1 2020 16.50			V-4 W-:-1-4	
	Date P	rep: 09.2	21.2020 16:50		Basis: v	vet weight	
Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
PHC610	<50.1	50.1		mg/kg	09.21.2020 19:1	9 U	1
C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 19:1	9 U	1
PHCG2835	<50.1	50.1		mg/kg	09.21.2020 19:1	9 U	1
PHC628	<50.1	50.1		mg/kg	09.21.2020 19:1	9 U	1
PHC635	<50.1	50.1		mg/kg	09.21.2020 19:1	9 U	1
	Cas Number	% Recovery	Units	Limits	Analysis Da	ite Flag	
	111-85-3	96	%	70-135	09.21.2020 19	:19	
	84-15-1	93	%	70-135	09.21.2020 19	:19	
	Cas Number PHC610 C10C28DRO PHC62835 PHC628 PHC635	Cas Number         Result           PHC610         <50.1	Cas Number         Result         RL           PHC610         <50.1	Cas Number       Result       RL         PHC610       <50.1	Date Prep:       09.21.2020 16:50         Cas Number       Result       RL       Units         PHC610       <50.1	Cas Number         Result         RL         Units         Analysis Date           PHC610         <50.1	Cas Number       Result       RL       Units       Analysis Date       Flag         PHC610       <50.1

# Certificate of Analytical Results 673152

Remuda South 25 #126H

Sample Id: <b>PH03</b> Lab Sample Id:673152-003		Matrix: Soil Date Collected: 09.21.2020 10:59		Date Received:09.21.2020 16:31 Sample Depth: 3 ft		
Analytical M Tech:	ethod: BTEX by EPA 8021B MAB			Prep Method: % Moisture:	SW5035A	
Analyst: Seq Number:	MAB 3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight	

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	09.21.2020 19:28	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.21.2020 19:28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	09.21.2020 19:28		
4-Bromofluorobenzene		460-00-4	90	%	70-130	09.21.2020 19:28		
# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id: <b>PH04</b> Lab Sample Id: 673152-004		Matrix: Date Colle	Soil ected: 09.21.2020 12:10	1	Date Received:0 Sample Depth: 3		:31
Analytical Method: Chloride by EPA Tech: MAB Analyst: MAB	. 300	Date Prep	: 09.22.2020 09:23		Prep Method: E % Moisture: Basis: V	E300P Wet Weight	
Seq Number: 3137776		Ĩ				U	
Parameter	Cas Number	Result	RL	Units	Analysis Date	e Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.22.2020 12:3	33 U	1

Analytical Method: TPH by SW801	15 Mod					Prep Method: S	W8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09.	21.2020 16:50		Basis: V	Vet Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Total GRO-DRO	PHC628	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Total TPH	PHC635	<50.0	50.0		mg/kg	09.21.2020 19:4	0 U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	94	%	70-135	09.21.2020 19	:40	
o-Terphenyl		84-15-1	89	%	70-135	09.21.2020 19	:40	

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id: <b>PH04</b> Lab Sample Id:673152-004	Matrix: Date Collecte	Soil ed: 09.21.2020 12:10	Date Receiv Sample Dep	red:09.21.2020 16:31 th: 3 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB			Prep Metho % Moisture	d: SW5035A
Analyst:MABSeq Number:3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	09.21.2020 19:50	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	09.21.2020 19:50	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	101	%	70-130	09.21.2020 19:50		
4-Bromofluorobenzene		460-00-4	91	%	70-130	09.21.2020 19:50		

# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample I	<b>PH05</b> d: 673152-005		Matrix: Date Col	Soil ected: 09.21.2020	) 12:29	Date Received Sample Depth	:09.21.2020 16 : 3 ft	:31
Analytical Me Tech:	ethod: Chloride by EPA MAB	300				Prep Method: % Moisture:	E300P	
Analyst:	MAB		Date Prep	o: 09.22.2020	0 09:23	Basis:	Wet Weight	
Seq Number:	3137776							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil
Chloride		16887-00-6	20.7	9.98	mg/kg	09.22.2020 12	2:39	1

Analytical Method: TPH by SW801	5 Mod					Prep Method: S	SW8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09	9.21.2020 16:50		Basis: V	Wet Weight	
Seq Number: 3137717								
Parameter	Cas Number	Result	RL		Units	Analysis Date	e Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 20:0	00 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 20:0	00 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.21.2020 20:0	00 U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 20:0	00 U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 20:0	00 U	1
Surrogate		Cas Number	% Recover	y Units	Limits	Analysis Da	ate Flag	
1-Chlorooctane		111-85-3	95	%	70-135	09.21.2020 20	0:00	
o-Terphenyl		84-15-1	90	%	70-135	09.21.2020 20	0:00	

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# **Certificate of Analytical Results 673152**

Remuda South 25 #126H

Sample Id:PH05Lab Sample Id:673152-005	Matrix: Soil Date Collected: 09.21.2020 12:29	Date Received:09.21.2020 16:31 Sample Depth: 3 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB Analyst: MAB	Date Prep: 09.21.2020 17:06	Prep Method: SW5035A % Moisture: Basis: Wet Weight
Seq Number: 3137712		

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	09.21.2020 20:13	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	09.21.2020 20:13	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	94	%	70-130	09.21.2020 20:13		
1,4-Difluorobenzene		540-36-3	88	%	70-130	09.21.2020 20:13		

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# **Certificate of Analytical Results 673152**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample I	<b>FS01</b> d: 673152-006		Matrix: Date Coll	Soil ected: 09.21.2020 14:46	i	Date Received Sample Depth		2020 16:3	31
Analytical Me Tech:	ethod: Chloride by EPA MAB	. 300				Prep Method: % Moisture:	E300F	)	
Analyst:	MAB		Date Prep	o: 09.22.2020 09:23	;	Basis:	Wet W	Veight	
Seq Number:	3137776								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	217	9.94	mg/kg	09.22.2020 12	2:44		1

Analytical Method: TPH by SW801	5 Mod					Prep Method: SV	V8015P	
Tech: DTH						% Moisture:		
Analyst: DTH		Date P	rep: 09	0.21.2020 16:50		Basis: W	et Weight	
Seq Number: 3137717								
Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.21.2020 20:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.21.2020 20:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	09.21.2020 20:20	U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.21.2020 20:20	U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.21.2020 20:20	U	1
Surrogate		Cas Number	% Recover	y Units	Limits	Analysis Dat	e Flag	
1-Chlorooctane		111-85-3	93	%	70-135	09.21.2020 20:	20	

86

%

70-135

09.21.2020 20:20

84-15-1

o-Terphenyl

# **Certificate of Analytical Results 673152**

# LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample I	<b>FS01</b> d: 673152-006	Matrix: Date Collected	Soil d: 09.21.2020 14:46	Date Received Sample Depth	d:09.21.2020 16:31 n: 1 ft
Analytical Mo Tech:	ethod: BTEX by EPA 8021B MAB			Prep Method: % Moisture:	SW5035A
Analyst: Seq Number:	MAB 3137712	Date Prep:	09.21.2020 17:06	Basis:	Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	09.21.2020 20:35	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	09.21.2020 20:35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	99	%	70-130	09.21.2020 20:35		
4-Bromofluorobenzene		460-00-4	88	%	70-130	09.21.2020 20:35		

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# **Flagging Criteria**

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

\*\* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.	ND Not Detected			
RL Reporting Limit				
MDL Method Detection Limit	SDL Sample De	tection Limit	LOD Limit of Detection	
PQL Practical Quantitation Limit	MQL Method Qu	antitation Limit	LOQ Limit of Quantitatio	n
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/Labo	ratory Control Sample Duplicate
MD/SD Method Duplicate/Sam	ple Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NELAC certification not offered	l for this compound.			

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

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QC Summary 673152

#### LT Environmental, Inc.

Remuda South 25 #126H

Analytical Method: Seq Number: MB Sample Id:	<b>Chloride by</b> 3137776 7711799-1-3		)0		Matrix: mple Id:	Solid 7711799-	1-BKS			rep Meth Date Pr D Sampl	rep: 09.2	00P 22.2020 1799-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Boggett	LCSD	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		<10.0	250 Allount	252	101	Result 253	<b>%Rec</b> 101	90-110	0	20	mg/kg	09.22.2020 10:01	
<b>Analytical Method:</b> Seq Number:	Chloride by 3137776	y EPA 30	)0		Matrix:	Soil			P	rep Meth Date Pr		00P 22.2020	
Parent Sample Id:	673152-001					673152-0	01 S		MS			152-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		30.5	199	231	101	234	102	90-110	1	20	mg/kg	09.22.2020 12:00	
Analytical Method: Seq Number:	<b>Chloride by</b> 3137776	y EPA 30	00		Matrix:	Soil			P	rep Meth Date Pr		00P 22.2020	
Parent Sample Id:	673161-001					673161-0	01 S		MS		•	161-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		385	198	602	110	587	100	90-110	3	20	mg/kg	09.22.2020 10:20	
Analytical Method: Seq Number:	<b>TPH by SW</b> 3137717	V8015 M	od		Matrix:					rep Meth Date Pr	rep: 09.2	8015P 21.2020	
MB Sample Id:	7711777-1-]				-	7711777-				-		1777-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb		< 50.0	1000	848	85	811	81	70-135	4	35	mg/kg	09.21.2020 12:16	
Diesel Range Organics	(DRO)	<50.0	1000	872	87	832	83	70-135	5	35	mg/kg	09.21.2020 12:16	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re			imits	Units	Analysis Date	
1-Chlorooctane		88			94		93			-135	%	09.21.2020 12:16	
o-Terphenyl		84			83		80		70	-135	%	09.21.2020 12:16	
Analytical Method: Seq Number:	<b>TPH by SW</b> 3137717	V8015 M	od		Matrix: nple Id:	Solid 7711777-	1-BLK		P	rep Meth Date Pr		8015P 21.2020	
Parameter				MB Result							Units	Analysis Date	Flag
Motor Oil Range Hydrocar	bons (MRO)			<50.0							mg/kg	09.21.2020 11:56	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-}A) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-}E) \ / \ (C\text{+}E) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

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

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QC Summary 673152

#### LT Environmental, Inc.

Remuda South 25 #126H

Analytical Method:	TPH by S	W8015 M	od						P	rep Meth	od: SW	8015P	
Seq Number:	3137717				Matrix:	Soil				Date Pr	ep: 09.2	21.2020	
Parent Sample Id:	673097-00	1		MS Sar	nple Id:	673097-00	01 S		MS	D Sample	e Id: 673	097-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	< 50.1	1000	852	85	846	85	70-135	1	35	mg/kg	09.21.2020 13:17	
Diesel Range Organics	(DRO)	68.8	1000	948	88	964	90	70-135	2	35	mg/kg	09.21.2020 13:17	
Surrogate					1S Rec	MS Flag	MSD %Ree			imits	Units	Analysis Date	
1-Chlorooctane				1	08		107		70	-135	%	09.21.2020 13:17	
o-Terphenyl				ç	93		93		70	-135	%	09.21.2020 13:17	

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>BTEX by EPA 8021</b> 3137712 7711754-1-BLK	В		Matrix: nple Id:	Solid 7711754-1	1-BKS			rep Meth Date Pr D Sample	ep: 09.2	5035A 21.2020 1754-1-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	0.0978	98	0.104	104	70-130	6	35	mg/kg	09.21.2020 11:38	
Toluene	< 0.00200	0.100	0.0948	95	0.101	101	70-130	6	35	mg/kg	09.21.2020 11:38	
Ethylbenzene	< 0.00200	0.100	0.0885	89	0.0941	94	71-129	6	35	mg/kg	09.21.2020 11:38	
m,p-Xylenes	< 0.00400	0.200	0.179	90	0.191	96	70-135	6	35	mg/kg	09.21.2020 11:38	
o-Xylene	< 0.00200	0.100	0.0873	87	0.0933	93	71-133	7	35	mg/kg	09.21.2020 11:38	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSI %Re			imits	Units	Analysis Date	
1,4-Difluorobenzene	100		9	9		99		70	-130	%	09.21.2020 11:38	
4-Bromofluorobenzene	86		8	39		93		70	-130	%	09.21.2020 11:38	

Analytical Method:	BTEX by EPA 8021	B						P	rep Metho	od: SW	5035A	
Seq Number:	3137712		]	Matrix:	Soil				Date Pr	ep: 09.2	21.2020	
Parent Sample Id:	673097-001		MS San	nple Id:	673097-00	01 S		MS	D Sample	e Id: 673	097-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.121	120	0.122	121	70-130	1	35	mg/kg	09.21.2020 12:23	
Toluene	< 0.00201	0.101	0.111	110	0.127	126	70-130	13	35	mg/kg	09.21.2020 12:23	
Ethylbenzene	< 0.00201	0.101	0.0935	93	0.118	117	71-129	23	35	mg/kg	09.21.2020 12:23	
m,p-Xylenes	< 0.00402	0.201	0.187	93	0.238	118	70-135	24	35	mg/kg	09.21.2020 12:23	
o-Xylene	< 0.00201	0.101	0.0916	91	0.116	115	71-133	24	35	mg/kg	09.21.2020 12:23	
Surrogate				IS Rec	MS Flag	MSE %Re			imits	Units	Analysis Date	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		98		70-130	%	09.21.2020 12:23
4-Bromofluorobenzene	92		85		70-130	%	09.21.2020 12:23

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-A}) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-E}) \ / \ (C\text{+E}) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

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

.

Page 20 of 22

X		Hobbs,NM	Houston, TX (281) 240-4; Midland, TX (432-704-5 (575-392-7550) Phoenix,	200 Dallas,TX (214) 902-0300 San Antonio, 440) EL Paso,TX (915)585-3443 Lubbock,T AZ (480-355-0900) Atlanta,GA (770-449-880	Houston, TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa FI (813-620-2000)		- 10
Project Manager: D	Dan Moir		Bill to: (if different)	t) Kyle Littrell		W	Page t of
-	LT Environmental, Inc.,	., Permian office	Company Name:	-			lents
Address: 33	3300 North A Street		Address:			State of Project:	ids IRC Derfund
City, State ZIP: Mi	Midland, Tx 79705		City, State ZIP				]
Phone: (4:	(432) 236-3849		Email: wmather@lten	Email: wmather@ltenv.com, dmoir@ltenv.com	m	Deliverables: EDD ADAPT	
Project Name:	Remuda South 25 #126H	25 #126H	Turn Around				Wato
Project Number:	//12919260	60	Routine P				MON OTHER NOTES
P.O. Number:	Eddy						
Sampler's Name:	William Mather	ather	Due Date:				
SAMPLE RECEIPT	-	No 200	Wet Ice: The No				
Temperature (°C):	1.t	The	10	ers			
Received Intact:	5	FOO MN-T	Ċ	1)			
Cooler Custody Seals:	S)	Correction Factor:	6.0	15) =802			
Sample Custody Seals:	No	Total Containers:	6	A 801 PA 0=			TAT starts the day receiied by the
Sample Identification	ation Matrix	Date Time Sampled Sampled	Depth	Numbe TPH (EP BTEX (El Chloride			Sample Comments
PH01	S	9/21/2020 13:20	3'	××			2
PH02	s	9/21/2020 13:29	ω	×			Discrete
PH03	s	9/21/2020 10:59	ŵ	×			Discrete
PH04	s	9/21/2020 12:10	ω	1 x x x			
PH05	s		3	×			Discrete
FS01	s		1.	×			Discrete
1							
	10	1 al					
Total 200.7 / 6010 Circle Method(s) an	Fotal     200.7 / 6010     200.8 / 6020:       Circle     Method(s)     and     Metal(s)     to be analyzed	8RCRA lyzed TCLP /	RCRA 13PPM Texas 11 / TCLP / SPLP 6010: 8RCRA	Al Sb As Ba Be B A Sb As Ba Be Cd	Po Cu Fe Pb Pb Mn Mo Ni	Mo Ni K Se Ag SiO2 TI U	Na Sr TI Sn U V Zn 1631/2451/2470/2471.40
Votice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcount 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 the 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	rent and relinquishment of sonly for the cost of sample \$75.00 will be applied to e	amples constitutes a v and shall not assume ach project and a charg	alid purchase order from cli any responsibility for any le e of \$5 for each sample sub	ent company to Xenco, its osses or expenses incurred mitted to Xenco, but not ar	affiliates and subcontractors. It assigns standard terms and condi by the client if such losses are due to circumstances beyond the c alyzed. These terms will be enforced unless previously neoplated	tions ontrol	
Relinquished by: (Sigpature)	pature)	Received by: (Signature)	nature)	Date/Time	Relinquished by: (Signature)	) Received by: (Signature)	DatoTim
Ma my	R C	or Cather		9-21-20 16:31	2		
					4		

Final 1.001

# **Eurofins Xenco, LLC**

#### Prelogin/Nonconformance Report- Sample Log-In

Acceptable Temperature Rar	nge: 0 - 6 degC
Air and Metal samples Accept	otable Range: Ambient
Temperature Measuring devi	ce used: T_NM_007
ot Checklist	Comments
7.4	
Yes	
No	
Yes	
Yes	
Yes	
	Samples received in bulk ontainers.
Yes	
Yes	
Yes	
Yes	
No	
N/A	
F	Air and Metal samples Accept Temperature Measuring devi of Checklist 7.4 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Date: 09.21.2020

Checklist reviewed by: Jessica WAMER Jessica Kramer

Date: 09.23.2020

eurofins

Environment Testing Xenco

# Project Id:012919260Contact:Dan MoirDan XoirDan Xoir

Project Location: Eddy County

## Certificate of Analysis Summary 673230

LT Environmental, Inc., Arvada, CO

#### Project Name: Remuda South 25 #126H

 Date Received in Lab:
 Tue 09.22.2020 13:25

 Report Date:
 09.23.2020 14:07

Project Manager: Jessica Kramer

	Lab Id:	673230-0	001	673230-0	02	673230-0	003	673230-	004	
Analysis Requested	Field Id:	SS07	,	SS08		SS09		SS010		
Anulysis Requested	Depth:	0.5- ft	t	0.5- ft		0.5- ft		0.5- f	t	
	Matrix:	SOIL		SOIL		SOIL		SOIL		
	Sampled:	09.21.2020	12:01	09.22.2020	10:22	09.22.2020	11:22	09.21.2020	14:05	
BTEX by EPA 8021B	Extracted:	09.22.2020	14:30	09.22.2020	14:30	09.22.2020	14:30	09.22.2020	14:30	
	Analyzed:	09.22.2020	18:19	09.22.2020	18:42	09.22.2020	19:04	09.22.2020	19:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
Toluene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
Ethylbenzene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
m,p-Xylenes		< 0.00400	0.00400	< 0.00399	0.00399	< 0.00401	0.00401	< 0.00401	0.00401	
o-Xylene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
Total Xylenes		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
Total BTEX		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	
Chloride by EPA 300	Extracted:	09.22.2020	16:30	09.22.2020	16:30	09.22.2020	16:30	09.22.2020	16:30	
	Analyzed:	** ** **	**	09.22.2020	16:43	09.22.2020	16:51	09.22.2020	16:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		96.2	49.9	205	10.0	494	50.5	480	49.5	
TPH by SW8015 Mod	Extracted:	09.22.2020	14:10	09.22.2020	14:10	09.22.2020	14:10	09.22.2020	14:10	
	Analyzed:	09.22.2020	14:53	09.22.2020	15:13	09.22.2020	15:33	09.22.2020	15:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.1	50.1	<49.9	49.9	<49.8	49.8	
Diesel Range Organics (DRO)		<49.8	49.8	<50.1	50.1	57.1	49.9	<49.8	49.8	
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.1	50.1	<49.9	49.9	<49.8	49.8	
Total GRO-DRO		<49.8	49.8	<50.1	50.1	57.1	49.9	<49.8	49.8	
Total TPH		<49.8	49.8	<50.1	50.1	57.1	49.9	<49.8	49.8	

BRL - Below Reporting Limit

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

Jession Vramer

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Environment Testing Xenco

# Analytical Report 673230

for

### LT Environmental, Inc.

**Project Manager: Dan Moir** 

Remuda South 25 #126H

012919260

09.23.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins Environment Testing Xenco

09.23.2020

Project Manager: **Dan Moir LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **673230 Remuda South 25 #126H** Project Address: Eddy County

#### Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673230. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673230 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

fession kenner

Jessica Kramer Project Manager

A Small Business and Minority Company

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

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### Sample Cross Reference 673230

Remuda South 25 #126H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS07	S	09.21.2020 12:01	0.5 ft	673230-001
SS08	S	09.22.2020 10:22	0.5 ft	673230-002
SS09	S	09.22.2020 11:22	0.5 ft	673230-003
SS010	S	09.21.2020 14:05	0.5 ft	673230-004

Environment Testing Xenco

#### **CASE NARRATIVE**

Client Name: LT Environmental, Inc. Project Name: Remuda South 25 #126H

 Project ID:
 012919260

 Work Order Number(s):
 673230

 Report Date:
 09.23.2020

 Date Received:
 09.22.2020

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

#### Environment Testi Xenco

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: Lab Sample Id:	<b>SS07</b> 673230-001		Matrix: Date Colle	Soil ected: 09.21.2020 12:01		Date Received:09.2 Sample Depth: 0.5		:25
Tech: Analyst:	hod: Chloride by EPA MAB MAB 3137842	. 300	Date Prep:	09.22.2020 16:30		Prep Method: E30 % Moisture: Basis: We	00P t Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	96.2	49.9	mg/kg	09.22.2020 16:21		5

Analytical Method: TPH by SW80. Tech: DTH	15 Mod					<ul><li>Prep Method: S</li><li>% Moisture:</li></ul>	W8015P	
Analyst: DTH		Date P	rep: 09.2	2.2020 14:10		Basis: W	Vet Weight	
Seq Number: 3137782								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	09.22.2020 14:53	3 U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	09.22.2020 14:53	3 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	09.22.2020 14:53	3 U	1
Total GRO-DRO	PHC628	<49.8	49.8		mg/kg	09.22.2020 14:53	3 U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	09.22.2020 14:53	3 U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Da	te Flag	
1-Chlorooctane		111-85-3	103	%	70-135	09.22.2020 14	:53	
o-Terphenyl		84-15-1	100	%	70-135	09.22.2020 14	:53	

#### Environment Testi Xenco

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:SS07Lab Sample Id:673230-001	Matrix: Soil Date Collected: 09.21.2020 1	Date Received:09.22.2020 13:25           2:01         Sample Depth: 0.5 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB Analyst: MAB See Number: 3137826	Date Prep: 09.22.2020 1	Prep Method:SW5035A% Moisture:4:30Basis:Wet Weight
Seq Number: 3137826		

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	09.22.2020 18:19	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.22.2020 18:19	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	09.22.2020 18:19		
4-Bromofluorobenzene		460-00-4	92	%	70-130	09.22.2020 18:19		

#### Environment Testin Xenco

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: <b>SS08</b> Lab Sample Id: 673230-002		Matrix: Date Collect	Soil ted: 09.22.2020 10:22		Date Received:0 Sample Depth: 0		:25
Analytical Method:Chloride by EP.Tech:MABAnalyst:MABSeq Number:3137842	A 300	Date Prep:	09.22.2020 16:30		Prep Method: E % Moisture: Basis: V	E300P Vet Weight	
Parameter	Cas Number	Result I	8L	Units	Analysis Date	e Flag	Dil
Parameter Chloride	Cas Number 16887-00-6	Result H	RL 10.0	Units mg/kg	Analysis Date 09.22.2020 16:4		<b>Dil</b>
					•		<b>Dil</b> 1

Analyst: DTH Seq Number: 3137782		Date P	rep: 09.	22.2020 14:10		Basis: W	et Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1		mg/kg	09.22.2020 15:13	3 U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1		mg/kg	09.22.2020 15:13	3 U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1		mg/kg	09.22.2020 15:13	3 U	1
Total GRO-DRO	PHC628	<50.1	50.1		mg/kg	09.22.2020 15:13	3 U	1
Total TPH	PHC635	<50.1	50.1		mg/kg	09.22.2020 15:13	3 U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Dat	te Flag	
1-Chlorooctane		111-85-3	104	%	70-135	09.22.2020 15:	13	
o-Terphenyl		84-15-1	98	%	70-135	09.22.2020 15:	13	

#### Environment Testi Xenco

### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:SS08Lab Sample Id:673230-002	Matrix: Date Collecte	Soil d: 09.22.2020 10:22	Date Receiver Sample Depth	d:09.22.2020 13:25 n: 0.5 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB			Prep Method: % Moisture:	SW5035A
Analyst: MAB Seq Number: 3137826	Date Prep:	09.22.2020 14:30	Basis:	Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	09.22.2020 18:42	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.22.2020 18:42	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	94	%	70-130	09.22.2020 18:42		
1,4-Difluorobenzene		540-36-3	102	%	70-130	09.22.2020 18:42		

#### Environment Testin Xenco

# **Certificate of Analytical Results 673230**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id: <b>SS09</b> Lab Sample Id: 673230-003		Matrix: Date Collec	Soil cted: 09.22.2020 11:22	Date Received:09.22.2020 1 11:22 Sample Depth: 0.5 ft			3:25	
Analytical Method: Chloride by EF	PA 300				Prep Method: E3	00P		
Tech: MAB					% Moisture:			
Analyst: MAB		Date Prep:	09.22.2020 16:30		Basis: W	et Weight		
Seq Number: 3137842								
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride	16887-00-6	494	50.5	mg/kg	09.22.2020 16:51		5	
Analytical Method: TPH by SW80	15 Mod				Prep Method: SV	V8015P		
Tech: DTH					% Moisture:			
Analyst: DTH		Date Prep:	09.22.2020 14:10		Basis: W	et Weight		
Seq Number: 3137782								
D. (	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Parameter								
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.22.2020 15:33	U	1	
	PHC610 C10C28DRO	<49.9 <b>57.1</b>	49.9 49.9	mg/kg mg/kg	09.22.2020 15:33 09.22.2020 15:33	U	1	

Total GRO-DRO Total TPH	PHC628 PHC635	57.1 57.1			mg/kg mg/kg	09.22.2020 15:33 09.22.2020 15:33		1 1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	99	%	70-135	09.22.2020 15:33		
o-Terphenyl		84-15-1	95	%	70-135	09.22.2020 15:33		

# **Certificate of Analytical Results 673230**

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### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:         SS09           Lab Sample Id:         673230-003	Matrix: Date Collecte	Soil d: 09.22.2020 11:22	Date Received:09.22.2020 13:25 Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B Tech: MAB Analyst: MAB	Date Prep:	09.22.2020 14:30	Prep Metho % Moisture Basis:	od: SW5035A e: Wet Weight	
Seq Number: 3137826					

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	09.22.2020 19:04	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.22.2020 19:04	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	88	%	70-130	09.22.2020 19:04		
1,4-Difluorobenzene		540-36-3	103	%	70-130	09.22.2020 19:04		

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# **Certificate of Analytical Results 673230**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:SS010Lab Sample Id:673230-004		Matrix: Date Collec	Soil eted: 09.21.2020 14:05		Date Received:09.22.2020 13:25 Sample Depth: 0.5 ft		
Analytical Method: Chloride by EP	A 300				Prep Method: E30	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	09.22.2020 16:30		Basis: We	t Weight	
Seq Number: 3137842							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	480	49.5	mg/kg	09.22.2020 16:58		5
Analytical Method: TPH by SW801 Tech: DTH Analyst: DTH Seq Number: 3137782	15 Mod	Date Prep:	09.22.2020 14:10		Prep Method: SW % Moisture: Basis: We	78015P et Weight	
Tech: DTH Analyst: DTH	15 Mod Cas Number	-	09.22.2020 14:10 RL	Units	% Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3137782		-		Units mg/kg	% Moisture: Basis: We	t Weight	<b>Dil</b>
Tech: DTH Analyst: DTH Seq Number: 3137782 Parameter	Cas Number	Result	RL		% Moisture: Basis: We Analysis Date	t Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3137782 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	<b>Result</b> 3	<b>RL</b> 49.8	mg/kg	% Moisture: Basis: We Analysis Date 09.22.2020 15:53	t Weight Flag U	1
Tech: DTH Analyst: DTH Seq Number: 3137782 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	<b>Result</b> 249.8 <49.8	<b>RL</b> 49.8 49.8	mg/kg mg/kg	% Moisture:           Basis:         We           Analysis Date           09.22.2020 15:53           09.22.2020 15:53	t Weight Flag U U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	09.22.2020 15:53	
o-Terphenyl	84-15-1	94	%	70-135	09.22.2020 15:53	

# **Certificate of Analytical Results 673230**

#### LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

Sample Id:SS010Lab Sample Id:673230-004	Matrix:	Soil	Date Receive	d:09.22.2020 13:25
	Date Collecte	d: 09.21.2020 14:05	Sample Depth	h: 0.5 ft
Analytical Method:BTEX by EPA 8021BTech:MABAnalyst:MABSeq Number:3137826	Date Prep:	09.22.2020 14:30	Prep Method: % Moisture: Basis:	SW5035A Wet Weight

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	09.22.2020 19:27	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	09.22.2020 19:27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	09.22.2020 19:27		
4-Bromofluorobenzene		460-00-4	89	%	70-130	09.22.2020 19:27		

- 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 De	tection Limit	LOD Limit of Detection	
PQL Practical Quantitation Limit	MQL Method Qu	antitation Limit	LOQ Limit of Quantitatio	n
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/Labo	ratory Control Sample Duplicate
MD/SD Method Duplicate/Sam	ple Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NELAC certification not offered	l for this compound.			

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

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QC Summary 673230

#### LT Environmental, Inc.

Remuda South 25 #126H

Analytical Method: Seq Number:	3137842		00		Matrix:		DVG			rep Metho Date Pr	ep: 09.2	22.2020	
MB Sample Id:	7711862-1-BL				-	7711862-				-		1862-1-BSD	
Parameter	R	MB sult	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<	10.0	250	252	101	252	101	90-110	0	20	mg/kg	09.22.2020 16:10	
Analytical Method:	Chloride by E	PA 3	00						P	rep Metho	od: E30	0P	
Seq Number:	3137842				Matrix:	Soil				Date Pr	ep: 09.2	22.2020	
Parent Sample Id:	673230-001			MS Sai	nple Id:	673230-00	01 S		MS	D Sample	e Id: 673	230-001 SD	
Parameter		rent esult	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		96.2	200	295	99	290	98	90-110	2	20	mg/kg	09.22.2020 16:27	
Analytical Method:	-	PA 3	00			a 11			P	rep Metho			
Seq Number:	3137842				Matrix:		225		MC	Date Pr	-	22.2020	
Parent Sample Id:	673274-003				•	673274-00				•		274-003 SD	
Parameter		rent esult	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		861	198	1050	95	1040	90	90-110	1	20	mg/kg	09.22.2020 18:06	
Analytical Method:	TPH by SW80	15 M	od						P	rep Metho	od: SW	8015P	
						G 1' 1				Date Pr	am. 00 7	22.2020	
Seq Number:	3137782				Matrix:	Solid				Duterr	ep: 09.2		
Seq Number: MB Sample Id:	3137782 7711834-1-BL	K				Solid 7711834-1	I-BKS		LCS		-	1834-1-BSD	
-	7711834-1-BL	K MB esult	Spike Amount			7711834-2 LCSD	l-BKS LCSD %Rec	Limits	LCS %RPD		-		Flag
MB Sample Id:	7711834-1-BL	MB	-	LCS Sat	nple Id: LCS	7711834-	LCSD	<b>Limits</b> 70-135		D Sample <b>RPD</b>	e Id: 771	1834-1-BSD Analysis	Flag
MB Sample Id: Parameter	7711834-1-BL R ons (GRO) <	MB esult	Amount	LCS Sai LCS Result	nple Id: LCS %Rec	7711834-1 LCSD Result	LCSD %Rec		%RPD	D Sample RPD Limit	e Id: 771 Units	1834-1-BSD Analysis Date	Flag
MB Sample Id: <b>Parameter</b> Gasoline Range Hydrocarbo	7711834-1-BL R ons (GRO) < (DRO) <	MB esult	<b>Amount</b> 1000	LCS San LCS Result 913 918	nple Id: LCS %Rec 91	7711834-1 LCSD Result 912	<b>LCSD</b> %Rec 91	70-135 70-135 D LCS	%RPD 0 1 D L	D Sample RPD Limit 35	Units mg/kg	1834-1-BSD Analysis Date 09.22.2020 10:15	Flag
MB Sample Id: <b>Parameter</b> Gasoline Range Hydrocarbo Diesel Range Organics (	7711834-1-BL R ons (GRO) < (DRO) <	MB esult 50.0 50.0 MB	<b>Amount</b> 1000 1000 <b>MB</b>	LCS Sat LCS Result 913 918 L	nple Id: LCS %Rec 91 92 CS	7711834- <b>LCSD</b> <b>Result</b> 912 926 <b>LCS</b>	LCSD %Rec 91 93 LCSI	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g	D Sample RPD Limit 35 35	units Units mg/kg mg/kg	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis	Flag
MB Sample Id: Parameter Gasoline Range Hydrocarbo Diesel Range Organics ( Surrogate	7711834-1-BL R ons (GRO) < (DRO) <	MB esult 50.0 50.0 MB %Rec	<b>Amount</b> 1000 1000 <b>MB</b>	LCS Sat LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec	7711834- <b>LCSD</b> <b>Result</b> 912 926 <b>LCS</b>	LCSD %Rec 91 93 LCSI %Re	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70	D Sample RPD Limit 35 35 amits	e Id: 771 Units mg/kg mg/kg Units	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date	Flag
MB Sample Id: Parameter Gasoline Range Hydrocarbo Diesel Range Organics of Surrogate 1-Chlorooctane	7711834-1-BL R ons (GRO) < (DRO) <	MB esult 50.0 50.0 MB 6Rec 96	<b>Amount</b> 1000 1000 <b>MB</b>	LCS Sat LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec 01	7711834- <b>LCSD</b> <b>Result</b> 912 926 <b>LCS</b>	LCSD %Rec 91 93 LCSI %Re 104	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70	D Sample RPD Limit 35 35 imits -135	e Id: 771 Units mg/kg mg/kg Units %	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15	Flag
MB Sample Id: Parameter Gasoline Range Hydrocarbo Diesel Range Organics of Surrogate 1-Chlorooctane	7711834-1-BL Roons (GRO) < (DRO) <	MB esult 50.0 50.0 MB 6Rec 96 91	Amount 1000 1000 MB Flag	LCS Sat LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec 01	7711834- <b>LCSD</b> <b>Result</b> 912 926 <b>LCS</b>	LCSD %Rec 91 93 LCSI %Re 104	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70 70	D Sample RPD Limit 35 35 imits -135	e Id: 771 Units mg/kg mg/kg Units % %	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15	Flag
MB Sample Id: <b>Parameter</b> Gasoline Range Hydrocarbi Diesel Range Organics ( <b>Surrogate</b> 1-Chlorooctane o-Terphenyl	7711834-1-BL Roons (GRO) < (DRO) <	MB esult 50.0 50.0 MB 6Rec 96 91	Amount 1000 1000 MB Flag	LCS Sar LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec 01 86 Matrix:	7711834- LCSD Result 912 926 LCS Flag	LCSD %Rec 91 93 LCSI %Re 104 90	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70 70	D Sample <b>RPD</b> Limit 35 35 <b>imits</b> -135 -135	e Id: 771 Units mg/kg mg/kg Units % %	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15 09.22.2020 10:15	Flag
MB Sample Id: <b>Parameter</b> Gasoline Range Hydrocarbo Diesel Range Organics of <b>Surrogate</b> 1-Chlorooctane o-Terphenyl <b>Analytical Method:</b>	7711834-1-BL R ons (GRO) < (DRO) < TPH by SW80	MB esult 50.0 50.0 MB 6Rec 96 91	Amount 1000 1000 MB Flag	LCS Sar LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec 01 86 Matrix:	7711834- LCSD Result 912 926 LCS Flag	LCSD %Rec 91 93 LCSI %Re 104 90	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70 70	D Sample <b>RPD</b> Limit 35 35 <b>imits</b> -135 -135 rep Metho	e Id: 771 Units mg/kg mg/kg Units % %	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15 09.22.2020 10:15 09.22.2020 10:15	Flag
MB Sample Id: <b>Parameter</b> Gasoline Range Hydrocarbo Diesel Range Organics of <b>Surrogate</b> 1-Chlorooctane o-Terphenyl <b>Analytical Method:</b>	7711834-1-BL R ons (GRO) < (DRO) < TPH by SW80	MB esult 50.0 50.0 MB 6Rec 96 91	Amount 1000 1000 MB Flag	LCS Sar LCS Result 913 918 L %	nple Id: LCS %Rec 91 92 CS Rec 01 86 Matrix:	7711834- LCSD Result 912 926 LCS Flag	LCSD %Rec 91 93 LCSI %Re 104 90	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70 70	D Sample <b>RPD</b> Limit 35 35 <b>imits</b> -135 -135 rep Metho	e Id: 771 Units mg/kg mg/kg Units % %	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15 09.22.2020 10:15 09.22.2020 10:15	Flag
MB Sample Id: Parameter Gasoline Range Hydrocarbo Diesel Range Organics ( Surrogate 1-Chlorooctane o-Terphenyl Analytical Method: Seq Number:	7711834-1-BL R ons (GRO) < (DRO) < <b>TPH by SW80</b> 3137782	MB esult 50.0 50.0 MB 6Rec 96 91	Amount 1000 1000 MB Flag	LCS Sat LCS Result 913 918 L % 1	nple Id: LCS %Rec 91 92 CS Rec 01 86 Matrix:	7711834- LCSD Result 912 926 LCS Flag	LCSD %Rec 91 93 LCSI %Re 104 90	70-135 70-135 D LCS c Fla	%RPD 0 1 D Li g 70 70	D Sample <b>RPD</b> Limit 35 35 <b>imits</b> -135 -135 rep Metho	e Id: 771 Units mg/kg mg/kg Units % % od: SW ep: 09.2	1834-1-BSD Analysis Date 09.22.2020 10:15 09.22.2020 10:15 Analysis Date 09.22.2020 10:15 09.22.2020 10:15 09.22.2020 10:15 8015P 22.2020 Analysis	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-}A) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-}E) \ / \ (C\text{+}E) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

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

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QC Summary 673230

Prep Method: SW8015P

#### LT Environmental, Inc.

Remuda South 25 #126H

**Environment Testing** 

Seq Number:	3137782			I	Matrix:	Soil				Date Pr	ep: 09.2	22.2020	
Parent Sample Id:	673161-00	1		MS San	nple Id:	673161-00	01 S		MS	D Sample	e Id: 673	161-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocar	bons (GRO)	< 50.2	1000	838	84	859	86	70-135	2	35	mg/kg	09.22.2020 11:15	
Diesel Range Organics	(DRO)	< 50.2	1000	856	86	874	88	70-135	2	35	mg/kg	09.22.2020 11:15	
Surrogate				M %1	IS Rec	MS Flag	MSD %Re			imits	Units	Analysis Date	
1-Chlorooctane				10	08		111		70	-135	%	09.22.2020 11:15	
o-Terphenyl				9	4		96		70	-135	%	09.22.2020 11:15	

Analytical Method:	BTEX by EPA 8021	B						P	rep Metho	od: SW	5035A	
Seq Number:	3137826		]	Matrix:	Solid				Date Pr	ep: 09.2	22.2020	
MB Sample Id:	7711823-1-BLK		LCS San	nple Id:	7711823-	1-BKS		LCS	D Sample	e Id: 771	1823-1-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	0.112	112	0.103	103	70-130	8	35	mg/kg	09.22.2020 10:52	
Toluene	< 0.00200	0.100	0.108	108	0.0992	99	70-130	8	35	mg/kg	09.22.2020 10:52	
Ethylbenzene	< 0.00200	0.100	0.101	101	0.0923	92	71-129	9	35	mg/kg	09.22.2020 10:52	
m,p-Xylenes	< 0.00400	0.200	0.202	101	0.186	93	70-135	8	35	mg/kg	09.22.2020 10:52	
o-Xylene	< 0.00200	0.100	0.100	100	0.0922	92	71-133	8	35	mg/kg	09.22.2020 10:52	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re			imits	Units	Analysis Date	
1,4-Difluorobenzene	99		9	19		99		70	-130	%	09.22.2020 10:52	
4-Bromofluorobenzene	87		8	6		92		70	-130	%	09.22.2020 10:52	

Analytical Method: Seq Number:	3137826	В		Matrix:					rep Methe Date Pr	ep: 09.2	5035A 22.2020	
Parent Sample Id:	673161-001		MS Sar	npie ia:	673161-00	11.5		MS	D Sample	e Ia: 6/3	161-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.123	123	0.104	104	70-130	17	35	mg/kg	09.22.2020 11:37	
Toluene	< 0.00200	0.100	0.127	127	0.0993	99	70-130	24	35	mg/kg	09.22.2020 11:37	
Ethylbenzene	< 0.00200	0.100	0.117	117	0.0895	90	71-129	27	35	mg/kg	09.22.2020 11:37	
m,p-Xylenes	< 0.00400	0.200	0.237	119	0.181	90	70-135	27	35	mg/kg	09.22.2020 11:37	
o-Xylene	< 0.00200	0.100	0.116	116	0.0885	89	71-133	27	35	mg/kg	09.22.2020 11:37	
Surrogate				IS Rec	MS Flag	MSD %Re			imits	Units	Analysis Date	
1,4-Difluorobenzene			ç	99		99		70	-130	%	09.22.2020 11:37	

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

4-Bromofluorobenzene

 $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-A}) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-E}) \ / \ (C\text{+E}) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

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

89

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

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09.22.2020 11:37

89

70-130

%

5	ŵ	M.M.	Relinquished by: (Signature	Notice: Signature of this d of service. Xenco will be li of Xenco. A minimum cha	Total 200.7 / 6010 Circle Method(s) a	:20:					SS10	SS09	SS08	SS07	Sample Identification	Sample Custody Seals:	Cooler Custody Seals:	Received Intact:	Temperature (°C):	SAMPLE RECEIPT	Sampler's Name:	P.O. Number:	Project Number:	Project Name:	Phone:	City, State ZIP:	Address:	Company Name:	Project Manager:	Page 13
	7	R	(Signature)	votice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcon 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 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	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	_					s	s	s	7 S	tification Matrix		S: Yes Ale NA	(Yes) No	3.6/3.4	IPT Temp Blank:	William Mather	Eddy	0 12919260	Remuda South 25 #126H	(432) 236-3849	Midland, Tx 79705	3300 North A Street	LT Environmental, Inc.,	Dan Moir	
	4	HC.	Received by: (Signature)	of samples constitutes a ples and shall not assum to each project and a cha			-	1, v	6/ 1		9/21/2020 14	9/22/2020 11	9/22/2020 10	9/21/2020 12	Date Sampled		Correction Factor:	+NM	Therm	Yes No	Mather	Ϋ́	260	th 25 #126H				c., Permian office		Hobbs,NM (
			ignature)	valid purchase order from e any responsibility for an rge of \$5 for each sample	RCRA 13PPM Texas 11 / TCLP / SPLP 6010: 8RCRA		X	1			14:05 0.5'	11:22 0.5'	10:22 0.5'	12:01 0.5'	Time Depth Sampled	ainers: A	actor: -0-2	MOOT	Thermometer ID	Wet Ice: Yes No	Due Date:	Rush:	Routine #	Turn Around	Email: wmather@lter	City, State ZIP	Address:	Company Name:	Bill to: (if different)	Houston, TX (281) 240-4 Midland, TX (432-704-5 575-392-7550) Phoenix
		9/22/20 13:35	Date/Time	I client company to Xenco, it I losses or expenses incurre submitted to Xenco, but not a	Al Sb As Ba Be RA Sb As Ba Be						1 × × ×	1 x x x	1 x x x	1 x x x	Numb TPH (E BTEX ( Chloric	PA 80	) )=8(	)21)		,					Email: wmather@ltenv.com, dmoir@ltenv.com	22		ne: XTO Energy	nt) Kyle Littrell	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX ( Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800)
5	4	2 2	Relinquished by: (Signature)	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 contro 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.	B Cd Ca Cr Co Cu Fe Cd Cr Co Cu Pb Mn M																			ANALYSIS REQUEST	m					
				tractors. It assigns standard terms and conditions losses are due to circumstances beyond the control will be enforced unless previously negotiated.	Pb Mg Mn Mo Ni k o Ni Se Ag Ti U		/												_					QUEST	Deliverables: EDD	Reporting:Level II	State of Project:	Program: UST/PST		(210) 509-3334 806)794-1296 Tampa,FL (813-620-2000)
			Received by: (Signature)	anditions he control ted.	Mn Mo Ni K Se Ag SiO2 Na Ag Ti U 1631																				D ADaPT		H	ST CRP Crownfields	Work Order Comments	www.xenco.com
			Date/Time		Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg						Discrete	Discrete	Discrete	Discrete	Sample Comments	lab, if received by 4:30pm	TAT starts the day received by th							Work Order Notes	Other:	ST TRP Upvel IV		Ids CC Derfund	mments	Page 1 of 1

Released to Imaging: 4/7/2021 9:10:22 AM

Final 1.000

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# **Eurofins Xenco, LLC**

#### Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.	Acceptable Temperature Range: 0 - 6 degC								
Date/ Time Received: 09.22.2020 01.25.00 PM	Air and Metal samples Acc								
Work Order #: 673230	Temperature Measuring de	evice used: T_NM_007							
Sample Rec	eipt Checklist	Comments							
#1 *Temperature of cooler(s)?	3.4								
#2 *Shipping container in good condition?	Yes								
#3 *Samples received on ice?	Yes								
#4 *Custody Seals intact on shipping container/ cooler?	Yes								
#5 Custody Seals intact on sample bottles?	Yes								
#6*Custody Seals Signed and dated?	Yes								
#7 *Chain of Custody present?	Yes								
#8 Any missing/extra samples?	No								
#9 Chain of Custody signed when relinquished/ received?	Yes								
#10 Chain of Custody agrees with sample labels/matrix?	Yes								
#11 Container label(s) legible and intact?	Yes								
#12 Samples in proper container/ bottle?	Yes	Samples received in bulk containers.							
#13 Samples properly preserved?	Yes								
#14 Sample container(s) intact?	Yes								
#15 Sufficient sample amount for indicated test(s)?	Yes								
#16 All samples received within hold time?	Yes								
#17 Subcontract of sample(s)?	No								
#18 Water VOC samples have zero headspace?	N/A								

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Date: 09.22.2020

Checklist reviewed by: Jessica WAMER Jessica Kramer

Date: 09.23.2020

CONDITIONS

Action 14934

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

#### CONDITIONS OF APPROVAL

Operator:		OGRID:	Action Number:	Action Type:
XTO ENER	RGY, INC 6401 Holiday Hill Road	5380	14934	C-141
Building #5	Midland, TX79707			
OCD Reviewer	Condition			
kcollins	When submitting future reports please submit each incident individually. Each should be subm	itted with a separate fee for ea	ach.	

kcollins When submitting future reports please submit each incident individually. Each should be submitted with a separate fee for each.