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 -103.935915
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name REMUDA SOUTH 25 STATE 126H | Site Type Well Location |
| Date Release Discovered 10/22/2019 | API# *(if applicable)* 30-015-44392 (REMUDA SOUTH 25 STATE 126H) |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| G | 25 | 23S | 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) 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.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM1935840155 |
| District RP | |
| Facility ID | |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br>☐ Yes ☒ No | If YES, for what reason(s) does the responsible party consider this a major release?<br>N/A |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br>N/A | |

## Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have 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

Signature: Date: 11/6/2019

email: Kyle_Littrell@xtoenergy.com Telephone:

**OCD Only**

Received by: Ramona Marcus Date: 12/24/2019

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM1935840155 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | >100 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☒ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☒ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☒ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☐ Yes ☒ No |

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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|---|---|
| Incident ID | NRM1935840155 |
| District RP | |
| Facility ID | |
| Application ID | |

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 01/18/2021

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

**OCD Only**

Received by: Date:

| | |
|---|---|
| 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.

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 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: Date:

Printed Name: Title:

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 | 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 32.277111 Longitude -103.935915
*(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 | API# *(if applicable)* 30-015-44392 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| G | 25 | 23S | 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.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

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|---|---|
| Incident ID | NRM2000235975 |
| District RP | |
| Facility ID | |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br>☐ Yes ☒ No | If YES, for what reason(s) does the responsible party consider this a major release?<br><br>N/A |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br><br>N/A | |

## Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have 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

Signature: Date: 11/8/2019

email: Kyle_Littrell@xtoenergy.com Telephone:

**OCD Only**

Received by: Ramona Marcus Date: 01/02/2020

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000235975 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | >100 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☒ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☒ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☒ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☐ Yes ☒ No |

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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|---|---|
| Incident ID | NRM2000235975 |
| District RP | |
| Facility ID | |
| Application ID | |

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 01/18/2021

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

**OCD Only**

Received by: Date:

State of New Mexico
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 of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 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: Date:

Printed Name: Title:

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 Longitude -103.935915
*(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 | API# *(if applicable)* 30-015-44392 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| G | 25 | 23S | 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.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000237294 |
| District RP | |
| Facility ID | |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br>☐ Yes ☒ No | If YES, for what reason(s) does the responsible party consider this a major release?<br><br>N/A |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br><br>N/A | |

## Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have 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

Signature: Date: 11-8-19

email: Kyle_Littrell@xtoenergy.com Telephone:

**OCD Only**

Received by: Ramona Marcus Date: 1/2/2020

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000237294 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | >100 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☒ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☒ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☒ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☒ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☒ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☐ Yes ☒ No |

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000237294 |
| District RP | |
| Facility ID | |
| Application ID | |

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 01/18/2021

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

**OCD Only**

Received by: Date:

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000237294 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 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: Date:

Printed Name: Title:

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NRM2000237294 |
| 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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 01/18/2021

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

**OCD Only**

Received by: Robert Hamlet Date: 4/30/2021

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

Closure Approved by: Robert Hamlet Date: 4/30/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

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

- 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® chloride QuanTab® 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

feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach© chloride QuanTab© test strips, respectively. Field screening results and observations for 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® chloride QuanTab® 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.

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
Associate Consultant, Environmental Scientist

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 1 Soil Analytical Results
Attachment 1 Referenced Well Records
Attachment 2 Lithologic/Soil Sampling Log
Attachment 3 Photographic Log



Attachment 4  Laboratory Analytical Reports

FIGURES

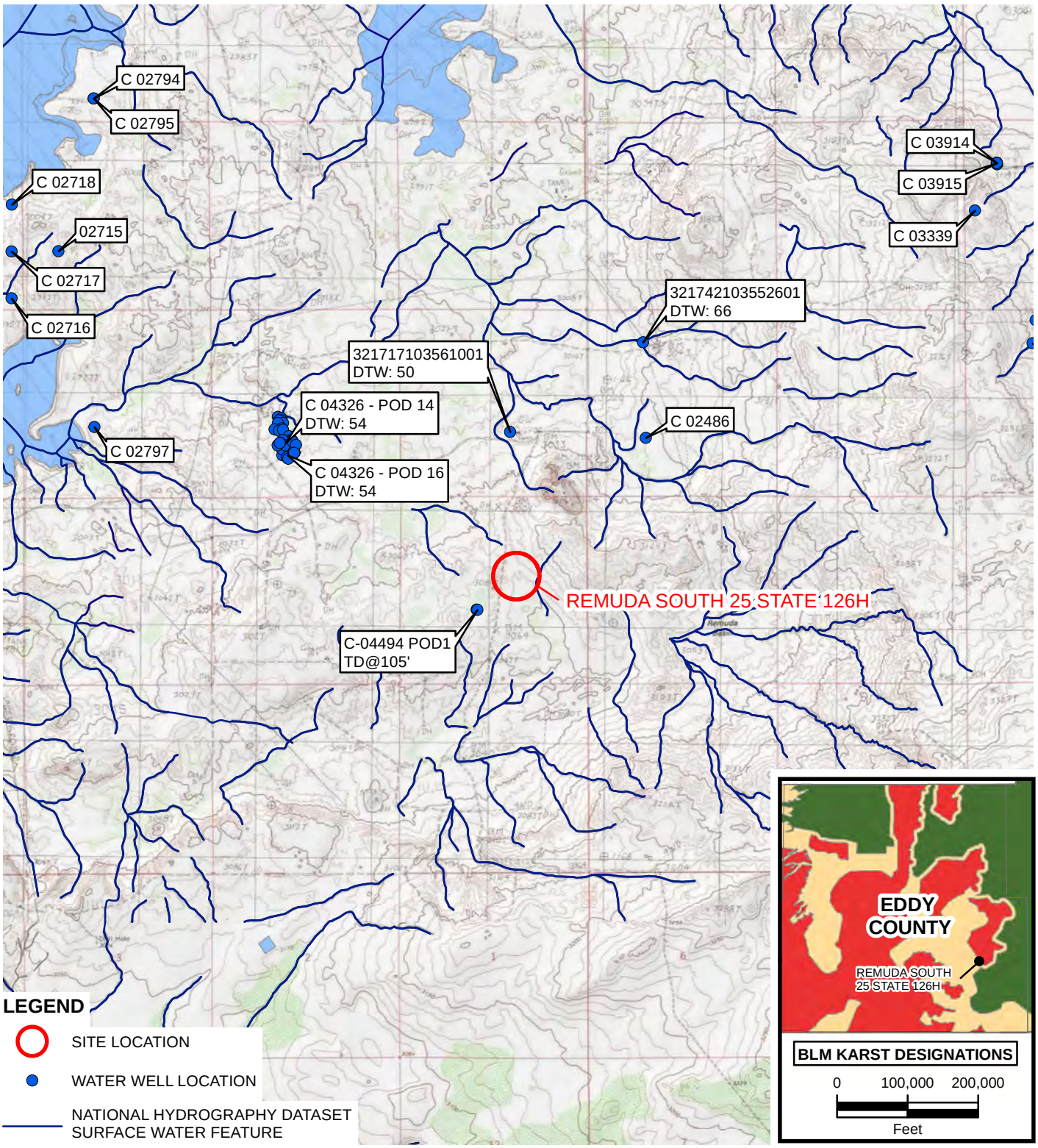


IMAGE COURTESY OF ESRI/USGS

NOTE: INCIDENT NUMBER NRM1935840155, NRM2000235975, & NRM2000237294
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET

FIGURE 1
SITE LOCATION MAP
REMUDA SOUTH 25 STATE 126H
UNIT G SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\012919260_REMUDA SOUTH 25 STATE 126H\012919260_FIG01_SL_RECEPTOR_2020.mxd


IMAGE COURTESY OF ESRI

**LEGEND**

- WELLHEAD
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

0 100 200
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
REMUDA SOUTH 25 STATE 126H
UNIT G SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\012919260_REMUDA SOUTH 25 STATE 126H\012919260_FIG02_PRELIMINARY_2020_1.mxd


IMAGE COURTESY OF ESRI

**LEGEND**

- WELLHEAD
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

0 100 200
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
REMUDA SOUTH 25 STATE 126H
UNIT G SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\012919260_REMUDA SOUTH 25 STATE 126H\012919260_FIG03_DELINEATION_2020.mxd


IMAGE COURTESY OF ESRI

**LEGEND**

- WELLHEAD
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- EXCAVATION EXTENT

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

0 50 100

Feet

N

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
REMUDA SOUTH 25 STATE 126H
UNIT G SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\012919260_REMUDA SOUTH 25 STATE 126H\012919260_FIG04_EXCAVATION_2020.mxd

TABLES

**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 Closure Criteria (NMAC 19.15.29)** | | | **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 |

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - motor oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
**BOLD** - indicates results exceed the higher of the background sample result or applicable regulatory standard

ATTACHMENT 1: REFERENCED WELL RECORDS

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

## Search Results -- 1 sites found

**Agency code =** usgs
**site_no list =**
- 321717103561001

**Minimum number of levels =** 1
Save file of selected sites to local disk for future upload

## 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 | A | 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 | A | Approved for publication -- Processing and review completed. |

Questions about sites/data?
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Data Tips
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U.S. Department of the Interior | U.S. Geological Survey
**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-01-18 10:45:17 EST
0.42 0.36 nadww01

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Contact USGS
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

## Search Results -- 1 sites found

**site_no list =**

- 321717103561001

**Minimum number of levels =** 1

Save file of selected sites to local disk for future upload

---

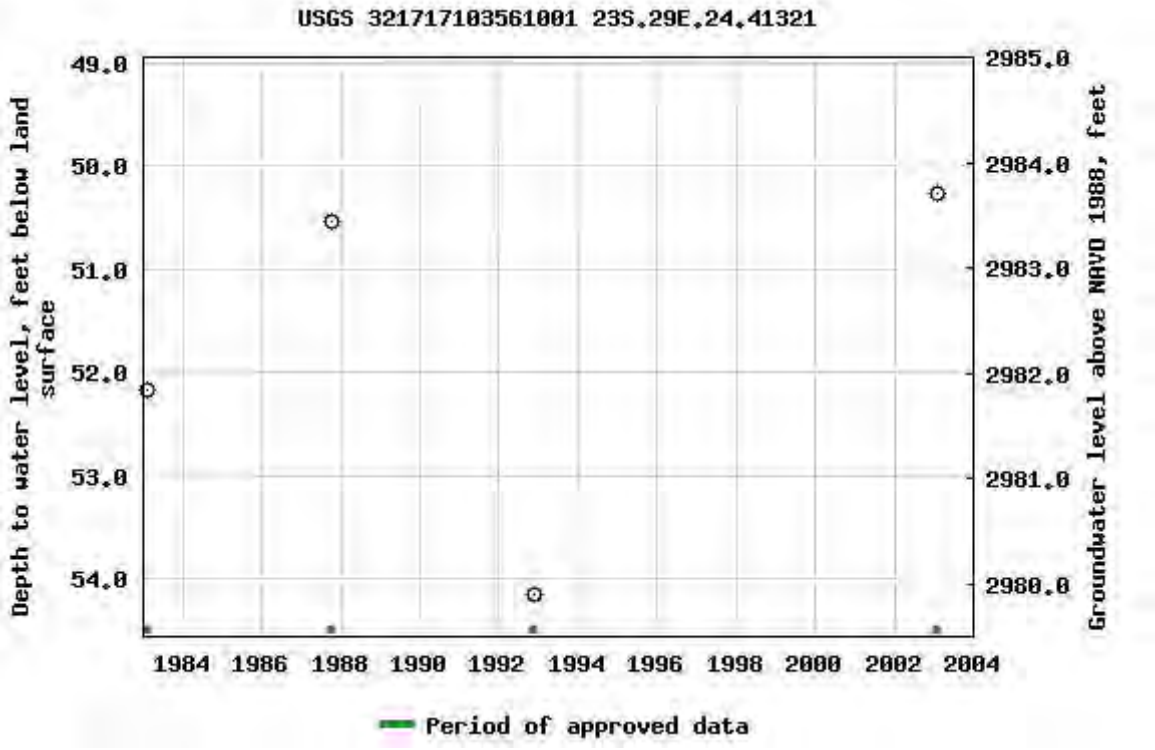
## USGS 321717103561001 23S.29E.24.41321

Available data for this site | Groundwater: Field measurements | GO

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.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




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

---

Questions about sites/data?
Feedback on this web site
Automated retrievals
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Data Tips
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**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-01-18 10:40:19 EST
0.76 0.54 nadww01

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- Full News

Groundwater levels for the Nation

## Search Results -- 1 sites found

**Agency code =** usgs
**site_no list =**
- 321742103552601

**Minimum number of levels =** 1
Save file of selected sites to local disk for future upload

## 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 | | | P | 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 | P | 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 |

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

---

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U.S. Department of the Interior | U.S. Geological Survey

**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-01-18 10:47:45 EST
0.32 0.29 nadww01

USGS Home
Contact USGS
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

## Search Results -- 1 sites found

**site_no list =**

- 321742103552601

**Minimum number of levels =** 1

Save file of selected sites to local disk for future upload

---

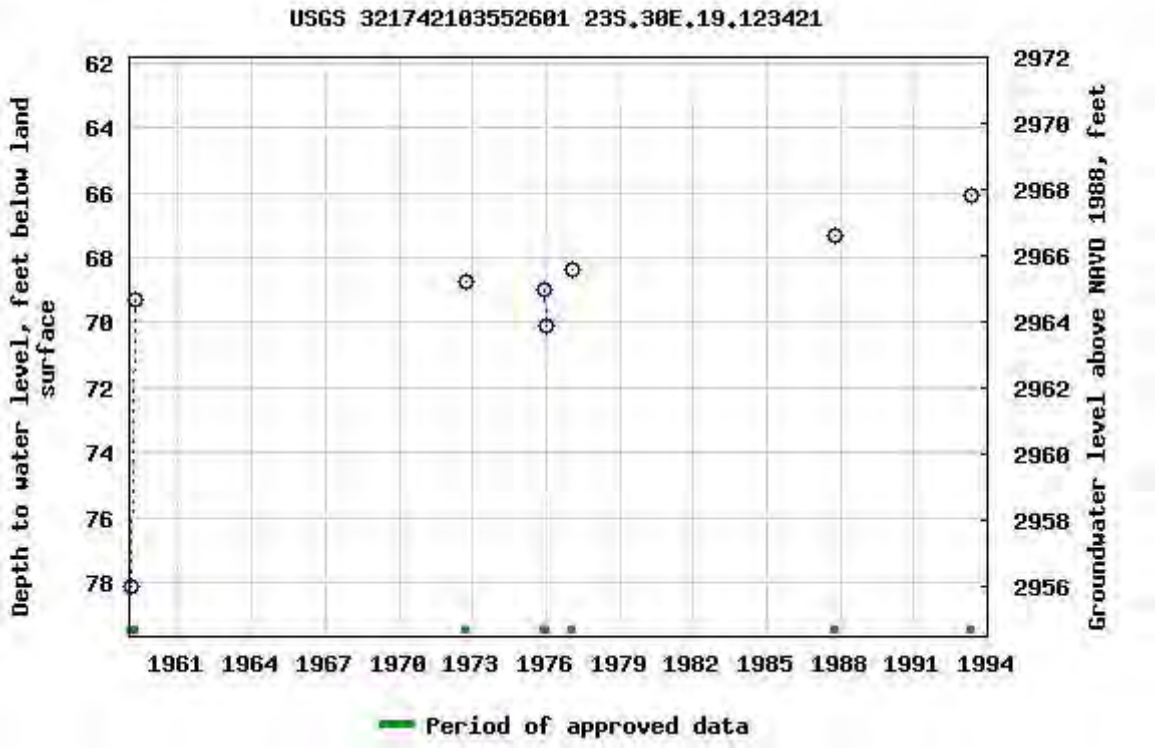
## USGS 321742103552601 23S.30E.19.123421

Available data for this site | Groundwater: Field measurements | 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 |
| Reselect period |




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

---

Questions about sites/data?
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**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-01-18 10:47:12 EST
0.7 0.6 nadww01

*New Mexico Office of the State Engineer*

# Point of Diversion Summary

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

| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Twn | Rng | X | Y |
|---|---|---|---|---|---|---|---|---|---|
| NA | C 04326 POD14 | 4 | 2 | 3 | 23 | 23S | 29E | 598191 | 3572765 |

**Driller License:** 1664 **Driller Company:** CASCADE DRILLING, LP

**Driller Name:** CAIN, SHAWN N.NJR.L.NER

**Drill Start Date:** 05/11/2019 **Drill Finish Date:** 05/11/2019 **Plug Date:**

**Log File Date:** 08/28/2019 **PCW Rcv Date:** **Source:** Shallow

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

**Casing Size:** 2.06 **Depth Well:** 58 feet **Depth Water:** 54 feet

| Water Bearing Stratifications: | Top | Bottom | Description |
|---|---|---|---|
| | 45 | 54 | Shale/Mudstone/Siltstone |

| Casing Perforations: | Top | Bottom |
|---|---|---|
| | 48 | 58 |

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

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

| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Twn | Rng | X | Y |
|---|---|---|---|---|---|---|---|---|---|
| NA | C 04326 POD16 | 2 | 4 | 3 | 23 | 23S | 29E | 598209 | 3572664 |

**Driller License:** 1664 **Driller Company:** CASCADE DRILLING, LP

**Driller Name:** CAIN, SHAWN N.NJR.L.NER

| | | | | | |
|---|---|---|---|---|---|
| **Drill Start Date:** | 05/14/2019 | **Drill Finish Date:** | 05/14/2019 | **Plug Date:** | |
| **Log File Date:** | 08/28/2019 | **PCW Rcv Date:** | | **Source:** | Shallow |
| **Pump Type:** | | **Pipe Discharge Size:** | | **Estimated Yield:** | |
| **Casing Size:** | 2.07 | **Depth Well:** | 64 feet | **Depth Water:** | 54 feet |

| Water Bearing Stratifications: | Top | Bottom | Description |
|---|---|---|---|
| | 52 | 60 | Limestone/Dolomite/Chalk |

| Casing Perforations: | Top | Bottom |
|---|---|---|
| | 54 | 64 |

ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOG

| WSP USA<br>508 West Stevens Street<br>Carlsbad, New Mexico 88220 | BH or MW Name: BH01 (POD 1, C-4494) | Date: 11/18/2020-12/02/2020 |
|---|---|---|
| | Site Name: Remuda Frac Pond Facility | |
| | RP or Incident Number: NAB1927332462 | |
| | WSP Job Number: TE012919195 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: BB, LD, FS | Method: Hollow Stem Auger |
| Lat/Long: 32.274194,-103.939575 | Field Screening: N/A | Hole Diameter: 6.25", 4.25" |
| | | Total Depth: 56.1<br>Depth to Water: DRY |

Backfill or Well Construction Materials / Comments:
Lithology and descriptions only, no field screening. Borehole backfilled with drill cuttings from 56.1' to 10', hydrated bentonite from 10' to surface.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks | Backfill / Well Completion |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | SP-SC | 0-4', SAND w/ clay, dry brown, poorly graded, fine grained, 10% clay, some roots, no stain, no odor. | Hydrated Bentonite Chips from 10' to surface |
| | | | | | | | CCHE | 4'-24', CALICHE, dry, light brown-tan, poorly consolidated, some sub-round caliche pebble and gravel, very silty, gradational transition, no stain, no odor. | |
| | | | | | | 10 | | | |
| | | | | | | | | 19', moderately consolidated. | |
| | | | | | | 20 | CL-S | 24'-39', MUDSTONE, dry, reddish-brown, low plasticity, cohesive, well consolidated, trace sub-angular caliche pebbles, sharp transition, no stain, no odor. | |
| | | | | | | 30 | | 34', tan-light brown sub-angular calcium carbonate gravel with dissolution features (1-3mm). | |
| | | | | | | | | 39'-56.1', air rotary, hole diameter to 4.25". | |
| | | | | | | 40 | LS | 39'-48', DOLOMITIC LIMESTONE, dry, tan-light brown, well consolidated, some dissolution features (1-3 mm), sharp transition, light reaction to HCL, no stain, no odor. | |
| | | | | | | | | 11/18/2020: air rotary refusal, TD@48' bgs.<br>12/02/2020: Continue drilling @ 48'bgs | |
| | | | | | | 50 | DOLO | 48'-56.1', DOLOMITE, dry, off white, moderately consolidated, thin dark gray laminations, no stain, no odor. | Drill Cuttings backfilled from 56.1' to 10' |
| | | | | | | | | TD @ 56.1 feet bgs. | |
| | | | | | | 60 | | | |

WSP USA
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Carlsbad, New Mexico 88220

BH or PH Name: BH01 (cont) Date: 1-5-2021
Site Name: Remuda N 25 State
RP or Incident Number:
WSP Job Number: TE02919260 TE0129191195, TE0291403?

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: BB F.S Method: Sonic
Lat/Long: 32.274194, -103.939575 Field Screening: NM Hole Diameter: 6" Total Depth: 105'

Comments: Borehole backfilled w/ drill cuttings from 105'-10', hydrated bentonite chips from 10'-surface, Lithology descriptions only, no field screening.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 51 | DOL | |
| | | | | | | 52 | | |
| | | | | | | 53 | | |
| | | | | | | 54 | | |
| | | | | | | 55 | | @ 55' |
| | | | | | | 56 | | 1/5/2021 |
| | | | | | | 57 | | 55'-65' DOLOMITE, dry, light gray-gray, well consolidated, some calcite crystalline veins (<1mm), some dissolution features (2mm) with fine calcite crystallin, trace orange oxidation staining within dissolution features, no stain, no odor. |
| | | | | | | 58 | | |
| | | | | | | 59 | | |
| | | | | | | 60 | | |
| | | | | | | 61 | | |
| | | | | | | 62 | | 62', brown-pale yellow coarse crystalline dolomitic limestone stringer (2cm). |
| | | | | | | 63 | | |
| | | | | | | 64 | | 63'-65' Abundant calcite crystalline veins (<1mm) |
| | | | | | | 65 | | 63'-65 Pale green-gray, poorly consolidated. |
| | | | | | | 66 | CH-S | 65'-69' MUDSTONE, moist, reddish brown, poorly consolidated, high plasticity, cohesive, abundant coarse crystalline gypsum, few pale green-gray mottling, no stain, no odor. |
| | | | | | | 67 | | |
| | | | | | | 68 | | |
| | | | | | | 69 | | |
| | | | | | | 70 | GYP | 69'-81' GYPSUM w/ Anhydrite, dry, greenish gray, some pale yellow, well consolidated, fine crystalline, 20% anhydrite, no stain, no odor. |
| | | | | | | 71 | | |
| | | | | | | 72 | | |
| | | | | | | 73 | | |
| | | | | | | 74 | | |
| | | | | | | 75 | | |

WSP USA
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Carlsbad, New Mexico 88220

| | |
|---|---|
| BH or PH Name: BH01 (cmt) | Date: 1-5-2021 |
| Site Name: Remuda N 25 State | |
| RP or Incident Number: | |
| WSP Job Number: TE01291916260, TE01291915, TE01291903 | |
| Logged By: BB, FS | Method: Grab |
| Hole Diameter: 6" | Total Depth: 105' |
| Lat/Long: 32.274194, -103.939575 | Field Screening: NA |

## LITHOLOGIC / SOIL SAMPLING LOG

Comments: Lithology descriptions only, no field screening. Borehole backfilled with drill cuttings from 105'-10', hydrated bentonite chips from 10'-surface.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 76 | GYP | |
| | | | | | | 77 | | 81'-98' Mudstone, moist, dark reddish brown, moderately consolidated, high plasticity, cohesive, trace coarse crystalline gypsum inclusions, no stain, no odor. |
| | | | | | | 78 | | |
| | | | | | | 79 | | |
| | | | | | | 80 | | |
| | | | | | | 81 | | 85'-86.5' greenish-gray well consolidated coarse crystalline gypsum/anhydrite stringer. |
| | | | | | | 82 | CH-S | 90'-98' Some fine grain brown sand. |
| | | | | | | 83 | | 97' dark gray-gray gypsum stringer (4cm). |
| | | | | | | 84 | | 98'-95.5' GYPSUM, dark gray-gray, some brown, dry, well consolidated, fine-coarse crystalline, no stain, no odor. |
| | | | | | | 85 | | |
| | | | | | | 86 | | |
| | | | | | | 87 | | 95.5'-105' Sandy SILTSTONE, moist, brown, some gray-dark gray, poorly consolidated, 20% very fine grain sand, no stain, no odor. |
| | | | | | | 88 | | |
| | | | | | | 89 | | |
| | | | | | | 90 | | |
| | | | | | | 91 | | 102' thin (1mm) laminated gray well consolidated shale stringer. |
| | | | | | | 92 | | |
| | | | | | | 93 | | |
| | | | | | | 94 | | |
| | | | | | | 95 | | |
| | | | | | | 96 | | |
| | | | | | | 97 | | |
| | | | | | | 98 | GYP | |
| | | | | | | 99 | | |
| | | | | | | 100 | ML-S | |

WSP USA
[redacted]

| | |
|---|---|
| BH or PH Name: BH01 (1 of 1) | Date: 1-5-2021 |
| Site Name: Remuda N25 State | |
| RP or Incident Number: | |
| WSP Job Number: TE01291976O, TE01291919S, TE01291939 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By: BB, FS | Method: Sonic | | |
| Lat/Long: 32.27411 94, -107.939 575 | Field Screening: N/A | Hole Diameter: 6" | Total Depth: 105' |

Comments: Lithology descriptions only, no field screening. Borehole backfilled with drill cuttings from 105'- 10', hydrated bentonite chips from 10'- surface.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 101 | ML-S | 102', thin (1mm) laminated black/gray well consolidated shale stringer (4cm thick) |
| | | | | | | 102 | | |
| | | | | | | 103 | | |
| | | | | | | 103 | | |
| | | | | | | 104 | | |
| | | | | | | 105 | | TDC 105' bgs. |
| | | | | | | 106 | TDC105' | |
| | | | | | | 107 | | |
| | | | | | | 108 | | |
| | | | | | | 109 | | |
| | | | | | | 110 | | |
| | | | | | | 112 | | |
| | | | | | | 113 | | |
| | | | | | | 114 | | |
| | | | | | | 115 | | |
| | | | | | | 116 | | |
| | | | | | | 117 | | |
| | | | | | | 118 | | |
| | | | | | | 119 | | |
| | | | | | | 120 | | |
| | | | | | | 121 | | |
| | | | | | | 122 | | |
| | | | | | | 123 | | |
| | | | | | | 124 | | |
| | | | | | | 125 | | |

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| BH or PH Name: PH01 | Date: 9/21/2020 |
| Site Name: Remuda S 25 126H | |
| Incident Number: NRM1935840155, NRM2000235975, and NRM2000 | |
| LTE Job Number: | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By Will Mather | Method: Backhoe | | |
| Lat/Long: | Field Screening: Chloride, PID | Hole Diameter: | Total Depth: |

Comments:

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| | 2,004 | 0.3 | N | | 1' | 1 | | sand, fine grian, poorly graded, Br/Rd, some silt, no stain, no odor |
| | 800 | 0.4 | N | | 2' | 2 | | Same as Above (SAA) |
| | <168 | 0.4 | N | PH01 | 3' | 3 | | SAA |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |

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| | |
|---|---|
| BH or PH Name: PH02 | Date: 9/21/2020 |
| Site Name: Remuda S 25 126H | |
| Incident Number: NRM1935840155, NRM2000235975, and NRM2000 | |
| LTE Job Number: | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By Will Mather | Method: Backhoe | | |
| Lat/Long: | Field Screening: Chloride, PID | Hole Diameter: | Total Depth: |

Comments:

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| | 2,004 | 0.6 | N | | 1' | 1 | | sand, fine grian, poorly graded, Br/Rd, some silt, no stain, no odor |
| | 1,752 | 0.1 | N | | 2' | 2 | | Same as Above (SAA) |
| | <168 | 0.2 | N | PH02 | 3' | 3 | | SAA |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| BH or PH Name: PH03 | Date: 9/21/2020 |
| Site Name: Remuda S 25 126H | |
| Incident Number: NRM1935840155, NRM2000235975, and NRM2000 | |
| LTE Job Number: | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By Will Mather / Method: Backhoe |
| Lat/Long: / Field Screening: Chloride, PID | Hole Diameter: / Total Depth: |
| Comments: | |

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| | 1,752 | 0.1 | N | | 1' | 1 | | sand, fine grian, poorly graded, Br/Rd, some silt, no stain, no odor |
| | 1,640 | 0.3 | N | | 2' | 2 | | Same as Above (SAA) |
| | 509 | 0.1 | N | PH03 | 3' | 3 | | SAA |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| BH or PH Name: PH04 | Date: 9/21/2020 |
| Site Name: Remuda S 25 126H | |
| Incident Number: NRM1935840155, NRM2000235975, and NRM2000 | |
| LTE Job Number: | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| | | | |
|---|---|---|---|
| Logged By Will Mather | Method: Backhoe | | |
| Lat/Long: | Field Screening: Chloride, PID | Hole Diameter: | Total Depth: |

Comments:

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| | 207 | 0.4 | N | | 1' | 1 | | sand, fine grian, poorly graded, Br/Rd, some silt, no stain, no odor |
| | <168 | 0.4 | N | | 2' | 2 | | Same as Above (SAA) |
| | <168 | 0.3 | N | PH04 | 3' | 3 | | SAA |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

| | |
|---|---|
| BH or PH Name: PH05 | Date: 9/21/2020 |
| Site Name: Remuda S 25 126H | |
| Incident Number: NRM1935840155, NRM2000235975, and NRM2000 | |
| LTE Job Number: | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By Will Mather / Method: Backhoe |
| Lat/Long: / Field Screening: Chloride, PID | Hole Diameter: / Total Depth: |
| Comments: | |

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample # | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithology/Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | | |
| | 207 | 0.6 | N | | 1' | 1 | | sand, fine grian, poorly graded, Br/Rd, some silt, no stain, no odor |
| | 257 | 0.5 | N | | 2' | 2 | | Same as Above (SAA) |
| | <168 | 0.2 | N | PH05 | 3' | 3 | | SAA |
| | | | | | | 4 | | |
| | | | | | | 5 | | |
| | | | | | | 6 | | |
| | | | | | | 7 | | |
| | | | | | | 8 | | |
| | | | | | | 9 | | |
| | | | | | | 10 | | |
| | | | | | | 11 | | |
| | | | | | | 12 | | |

ATTACHMENT 3: PHOTOGRAPHIC LOG

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| XTO Energy | Remuda South 25 State 126H<br>Eddy County, New Mexico | NRM1935840155<br>NRM2000235975<br>NRM2000237294 |

| Photo No. | Date |
|---|---|
| 1 | October 22, 2019 |

View of release on pad.


| Photo No. | Date |
|---|---|
| 2 | February 10, 2020 |

View of staining remaining on pad.

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| XTO Energy | Remuda South 25 State 126H<br>Eddy County, New Mexico | NRM1935840155<br>NRM2000235975<br>NRM2000237294 |

| Photo No. | Date |
|---|---|
| 3 | September 21, 2020 |

View of excavation facing East

| Photo No. | Date |
|---|---|
| 4 | September 22, 2020 |

View of backfill on pad.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

# 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,

Jessica Kramer

**Jessica Kramer**
Project Assistant

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

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

# Sample Cross Reference 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.

# Certificate of Analysis Summary 652122

## LT Environmental, Inc., Arvada, CO

## Project Name: Remuda South 25 #126H

**Project Id:**
**Contact:** Dan Moir
**Project Location:**

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

| Analysis Requested | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 652122-001 | | 652122-002 | | 652122-003 | | 652122-004 | | 652122-005 | | 652122-006 | |
| | ***Field Id:*** | SS01 | | SS02 | | SS03 | | SS04 | | SS05 | | SS06 | |
| | ***Depth:*** | 0.5- ft | | 0.5- ft | | 0.5- ft | | 0.5- ft | | 0.5- ft | | 0.5- ft | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | Feb-10-20 12:25 | | 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 |



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

Version: 1.%

Jessica Kramer
Project Assistant



Final 1.000

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet Weight |
| Seq Number: | 3116355 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **14700** | 504 | mg/kg | 02.12.20 14.15 | | 50 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS02** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-002 | Date Collected: | 02.10.20 12.30 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet Weight |
| Seq Number: | 3116355 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **4770** | 503 | mg/kg | 02.12.20 14.21 | | 50 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS02** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-002 | Date Collected: | 02.10.20 12.30 | 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 | <0.00201 | 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS03** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-003 | Date Collected: | 02.10.20 12.35 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet Weight |
| Seq Number: | 3116355 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **4030** | 499 | mg/kg | 02.12.20 14.27 | | 50 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS03** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-003 | Date Collected: | 02.10.20 12.35 | 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 | <0.00201 | 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS04** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-004 | Date Collected: | 02.10.20 12.40 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 | |
| o-Terphenyl | 84-15-1 | 98 | % | 70-135 | 02.12.20 14.15 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS04** | Matrix: | Soil | Date Received: | 02.12.20 11.57 |
| Lab Sample Id: | 652122-004 | Date Collected: | 02.10.20 12.40 | 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 | <0.00201 | 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 111-85-3 | 92 | % | 70-135 | 02.12.20 14.35 | |
| o-Terphenyl | 84-15-1 | 97 | % | 70-135 | 02.12.20 14.35 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 02.12.20 12.30 | Basis: | Wet Weight |
| Seq Number: | 3116355 | | | | |

| 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 02.12.20 13.00 | Basis: | Wet 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 | |
| o-Terphenyl | 84-15-1 | 97 | % | 70-135 | 02.12.20 14.35 | |

# Certificate of Analytical Results 652122

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| 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 Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

# QC Summary 652122

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116355 — Matrix: Solid — Date Prep: 02.12.20
MB Sample Id: 7696487-1-BLK — LCS Sample Id: 7696487-1-BKS — LCSD Sample Id: 7696487-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <10.0 | 250 | 255 | 102 | 256 | 102 | 90-110 | 0 | 20 | mg/kg | 02.12.20 11:58 | |

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116355 — Matrix: Soil — Date Prep: 02.12.20
Parent Sample Id: 652094-001 — MS Sample Id: 652094-001 S — MSD Sample Id: 652094-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 9040 | 200 | 9250 | 105 | 9220 | 90 | 90-110 | 0 | 20 | mg/kg | 02.12.20 12:15 | |

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116355 — Matrix: Soil — Date Prep: 02.12.20
Parent Sample Id: 652112-004 — MS Sample Id: 652112-004 S — MSD Sample Id: 652112-004 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 565 | 200 | 763 | 99 | 764 | 100 | 90-110 | 0 | 20 | mg/kg | 02.12.20 13:47 | |

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116314 — Matrix: Solid — Date Prep: 02.12.20
MB Sample Id: 7696489-1-BLK — LCS Sample Id: 7696489-1-BKS — LCSD Sample Id: 7696489-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.0 | 1000 | 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 | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 132 | | 117 | | 112 | | 70-135 | % | 02.12.20 11:36 |
| o-Terphenyl | 130 | | 100 | | 100 | | 70-135 | % | 02.12.20 11:36 |

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116314 — Matrix: Solid — Date Prep: 02.12.20
MB Sample Id: 7696489-1-BLK

| Parameter | MB Result | Units | Analysis Date | Flag |
|---|---|---|---|---|
| Motor Oil Range Hydrocarbons (MRO) | <50.0 | mg/kg | 02.12.20 11:16 | |

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

# QC Summary 652122

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116314 | Matrix: Soil | Date Prep: 02.12.20
Parent Sample Id: 652094-001 | MS Sample Id: 652094-001 S | MSD Sample Id: 652094-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.2 | 1000 | 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 106 | | 112 | | 70-135 | % | 02.12.20 11:56 |
| o-Terphenyl | 101 | | 108 | | 70-135 | % | 02.12.20 11:56 |

**Analytical Method:** BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116351 | Matrix: Solid | Date Prep: 02.12.20
MB Sample Id: 7696486-1-BLK | LCS Sample Id: 7696486-1-BKS | LCSD Sample Id: 7696486-1-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 | 0.118 | 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 | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 110 | | 108 | | 108 | | 70-130 | % | 02.12.20 12:21 |
| 4-Bromofluorobenzene | 96 | | 93 | | 94 | | 70-130 | % | 02.12.20 12:21 |

**Analytical Method:** BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116351 | Matrix: Soil | Date Prep: 02.12.20
Parent Sample Id: 652094-001 | MS Sample Id: 652094-001 S | MSD Sample Id: 652094-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | 0.0996 | 0.106 | 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 106 | | 107 | | 70-130 | % | 02.12.20 13:02 |
| 4-Bromofluorobenzene | 95 | | 94 | | 70-130 | % | 02.12.20 13:02 |

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

# Chain of Custody

Work Order No: 602122

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

| | | | |
|---|---|---|---|
| Project Manager: | Dan Moir | Bill to: (if different) | Kyle Littrel |
| Company Name: | LT Environmental, Inc., Permian office | Company Name: | XTO-Energy |
| Address: | 3300 North A Street | Address: | |
| City, State ZIP: | Midland, TX 79705 | City, State ZIP: | Carlsbad, NM |
| Phone: | 432.704.5178 Email: | | dmoir@ltenv.com rmcafee@ltenv.com |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Remuda South 25 #126H | Turn Around | |
| Project Number: | | Routine | ☑ |
| P.O. Number: | sp.11 date 10/25/19 | Rush: | 5 day |
| Sampler's Name: | Robert McAfee | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No | |
| Temperature (°C): | 0.4 | Thermometer ID | T-NM-007 | |
| Received Intact: | (Yes) No | | | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | 6 | |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 0=8021) | Chloride (EPA 300.0) |
|---|---|---|---|---|---|---|---|---|
| SS01 | S | 02/10/20 | 1225 | 0.5' | 1 | X | X | X |
| SS02 | | | 1230 | | | X | X | X |
| SS03 | | | 1235 | | | X | X | X |
| SS04 | | | 1240 | | | X | X | X |
| SS05 | | | 1245 | | | X | X | X |
| SS06 | | | 1305 | | | X | X | X |

**Work Order Notes**

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

**Sample Comments**

discrete

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

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

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

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| Robert McAfee | | 2/12/20 11:57 | 2 | | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date 051418 Rev. 2018.1

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 02.12.2020 11.57.00 AM

**Work Order #:** 652122

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

**Temperature Measuring device used : T-NM-007**

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

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

Analyst: PH Device/Lot#:

**Checklist completed by:** Elizabeth McClellan Date: 02.12.2020

**Checklist reviewed by:** Jessica Kramer Date: 02.12.2020

Jessica Kramer

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# Certificate of Analysis Summary 673152

## LT Environmental, Inc., Arvada, CO

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

**Project Id:** 012919260
**Contact:** Dan Moir
**Project Location:** Eddy County

**Date Received in Lab:** Mon 09.21.2020 16:31
**Report Date:** 09.23.2020 14:07
**Project Manager:** Jessica Kramer

| *Analysis Requested* | | 673152-001 | | 673152-002 | | 673152-003 | | 673152-004 | | 673152-005 | | 673152-006 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Field Id:* | PH01 | | PH02 | | PH03 | | PH04 | | PH05 | | FS01 | |
| | *Depth:* | 3- ft | | 3- ft | | 3- ft | | 3- ft | | 3- ft | | 3- 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Benzene | | <0.00200 | 0.00200 | <0.00199 | 0.00199 | <0.00200 | 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | <50.2 | 50.2 | <50.1 | 50.1 | <50.1 | 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

Jessica Kramer

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

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# 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)

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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,

Jessica Kramer

**Jessica Kramer**
Project Manager

*A Small Business and Minority Company*

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

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# Sample Cross Reference 673152

## LT Environmental, Inc., Arvada, CO

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 |

# CASE NARRATIVE

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***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

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-001 | Date Collected: | 09.21.2020 13:20 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| 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 Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet Weight |
| Seq Number: | 3137717 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-001 | Date Collected: | 09.21.2020 13:20 | Sample Depth: | 3 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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: | **PH02** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-002 | Date Collected: | 09.21.2020 13:29 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 09.22.2020 12:22 | U | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 Date | 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: | **PH02** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-002 | Date Collected: | 09.21.2020 13:29 | Sample Depth: | 3 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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: | **PH03** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-003 | Date Collected: | 09.21.2020 10:59 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| 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: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

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

| Parameter | Cas Number | 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: | **PH04** | 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 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 09.22.2020 12:33 | U | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 19:40 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Total GRO-DRO | PHC628 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Total TPH | PHC635 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH04** | 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 |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH05** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-005 | Date Collected: | 09.21.2020 12:29 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **20.7** | 9.98 | mg/kg | 09.22.2020 12:39 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 20:00 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Total GRO-DRO | PHC628 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

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

| Parameter | Cas Number | 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: | **FS01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-006 | Date Collected: | 09.21.2020 14:46 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **217** | 9.94 | mg/kg | 09.22.2020 12:44 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 | Units | Limits | Analysis Date | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **FS01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-006 | Date Collected: | 09.21.2020 14:46 | Sample Depth: | 3 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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 Detection Limit **LOD** Limit of Detection

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

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

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# QC Summary 673152

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Solid — Date Prep: 09.22.2020
MB Sample Id: 7711799-1-BLK — LCS Sample Id: 7711799-1-BKS — LCSD Sample Id: 7711799-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <10.0 | 250 | 252 | 101 | 253 | 101 | 90-110 | 0 | 20 | mg/kg | 09.22.2020 10:01 | |

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673152-001 — MS Sample Id: 673152-001 S — MSD Sample Id: 673152-001 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:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673161-001 — MS Sample Id: 673161-001 S — MSD Sample Id: 673161-001 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:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137717 — Matrix: Solid — Date Prep: 09.21.2020
MB Sample Id: 7711777-1-BLK — LCS Sample Id: 7711777-1-BKS — LCSD Sample Id: 7711777-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.0 | 1000 | 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 | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 88 | | 94 | | 93 | | 70-135 | % | 09.21.2020 12:16 |
| o-Terphenyl | 84 | | 83 | | 80 | | 70-135 | % | 09.21.2020 12:16 |

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137717 — Matrix: Solid — Date Prep: 09.21.2020
MB Sample Id: 7711777-1-BLK

| Parameter | MB Result | Units | Analysis Date | Flag |
|---|---|---|---|---|
| Motor Oil Range Hydrocarbons (MRO) | <50.0 | mg/kg | 09.21.2020 11:56 | |

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

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

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

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# QC Summary 673152

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3137717 Matrix: Soil Date Prep: 09.21.2020
Parent Sample Id: 673097-001 MS Sample Id: 673097-001 S MSD Sample Id: 673097-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.1 | 1000 | 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 108 | | 107 | | 70-135 | % | 09.21.2020 13:17 |
| o-Terphenyl | 93 | | 93 | | 70-135 | % | 09.21.2020 13:17 |

**Analytical Method:** **BTEX 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 LCSD Sample Id: 7711754-1-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 %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 100 | | 99 | | 99 | | 70-130 | % | 09.21.2020 11:38 |
| 4-Bromofluorobenzene | 86 | | 89 | | 93 | | 70-130 | % | 09.21.2020 11:38 |

**Analytical Method:** **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3137712 Matrix: Soil Date Prep: 09.21.2020
Parent Sample Id: 673097-001 MS Sample Id: 673097-001 S MSD Sample Id: 673097-001 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 | 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 [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

# Chain of Custody

XENCO LABORATORIES

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

**Work Order No:** 673152

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

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Remuda South 25 #126H | Turn Around | |
| Project Number: | 012919260 | Routine | ☑ |
| P.O. Number: | Eddy | Rush: | |
| Sampler's Name: | William Mather | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | (Yes) No |
| Temperature (°C): | 7.6 / 7.4 | Thermometer ID | |
| Received Intact: | (Yes) No | T-NM-007 | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | 6 |

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 0=8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| PH01 | s | 9/21/2020 | 13:20 | 3' | 1 | x | x | x | Discrete |
| PH02 | s | 9/21/2020 | 13:29 | 3' | 1 | x | x | x | Discrete |
| PH03 | s | 9/21/2020 | 10:59 | 3' | 1 | x | x | x | Discrete |
| PH04 | s | 9/21/2020 | 12:10 | 3' | 1 | x | x | x | Discrete |
| PH05 | s | 9/21/2020 | 12:29 | 3' | 1 | x | x | x | Discrete |
| FS01 | s | 9/21/2020 | 14:46 | 1' | 1 | x | x | x | Composite |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

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

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

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

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| | Cloe Cuffaro | 9.21.20 16:31 | 2 | | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date 051418 Rev. 2018.1

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 09.21.2020 04.31.00 PM

**Work Order #:** 673152

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

**Temperature Measuring device used : T_NM_007**

| Sample Receipt Checklist | | Comments |
|---|---|---|
| #1 *Temperature of cooler(s)? | 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:** Cloe Clifton Date: 09.21.2020

Cloe Clifton

**Checklist reviewed by:** Jessica Kramer Date: 09.23.2020

Jessica Kramer

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# Certificate of Analysis Summary 673152

## LT Environmental, Inc., Arvada, CO

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

**Project Id:** 012919260
**Contact:** Dan Moir
**Project Location:** Eddy County

**Date Received in Lab:** Mon 09.21.2020 16:31
**Report Date:** 09.24.2020 08:02
**Project Manager:** Jessica Kramer

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 673152-001 | | 673152-002 | | 673152-003 | | 673152-004 | | 673152-005 | | 673152-006 | |
| | ***Field Id:*** | PH01 | | PH02 | | PH03 | | PH04 | | PH05 | | FS01 | |
| | ***Depth:*** | 3- ft | | 3- ft | | 3- ft | | 3- ft | | 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Benzene | | <0.00200 | 0.00200 | <0.00199 | 0.00199 | <0.00200 | 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | 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 | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Gasoline Range Hydrocarbons (GRO) | | <50.2 | 50.2 | <50.1 | 50.1 | <50.1 | 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

Jessica Kramer

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# 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)

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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,

Jessica Kramer

**Jessica Kramer**
Project Manager

*A Small Business and Minority Company*

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

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# Sample Cross Reference 673152

## LT Environmental, Inc., Arvada, CO

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 |

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# 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

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-001 | Date Collected: | 09.21.2020 13:20 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| 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 Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet Weight |
| Seq Number: | 3137717 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-001 | Date Collected: | 09.21.2020 13:20 | Sample Depth: | 3 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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: | **PH02** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-002 | Date Collected: | 09.21.2020 13:29 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 09.22.2020 12:22 | U | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 Date | 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: | **PH02** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-002 | Date Collected: | 09.21.2020 13:29 | Sample Depth: | 3 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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: | **PH03** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-003 | Date Collected: | 09.21.2020 10:59 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| 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: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

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

| Parameter | Cas Number | 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: | **PH04** | 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 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <10.0 | 10.0 | mg/kg | 09.22.2020 12:33 | U | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 19:40 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Total GRO-DRO | PHC628 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |
| Total TPH | PHC635 | <50.0 | 50.0 | mg/kg | 09.21.2020 19:40 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH04** | 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 |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **PH05** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-005 | Date Collected: | 09.21.2020 12:29 | Sample Depth: | 3 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **20.7** | 9.98 | mg/kg | 09.22.2020 12:39 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 20:00 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Total GRO-DRO | PHC628 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | mg/kg | 09.21.2020 20:00 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

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

| Parameter | Cas Number | 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: | **FS01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-006 | Date Collected: | 09.21.2020 14:46 | Sample Depth: | 1 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 09:23 | Basis: | Wet Weight |
| Seq Number: | 3137776 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **217** | 9.94 | mg/kg | 09.22.2020 12:44 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.21.2020 16:50 | Basis: | Wet 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 | Units | Limits | Analysis Date | 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 | |

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# Certificate of Analytical Results 673152

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **FS01** | Matrix: | Soil | Date Received: | 09.21.2020 16:31 |
| Lab Sample Id: | 673152-006 | Date Collected: | 09.21.2020 14:46 | Sample Depth: | 1 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.21.2020 17:06 | Basis: | Wet Weight |
| Seq Number: | 3137712 | | | | |

| Parameter | Cas Number | 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 Detection Limit **LOD** Limit of Detection

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

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

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# QC Summary 673152

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Solid — Date Prep: 09.22.2020
MB Sample Id: 7711799-1-BLK — LCS Sample Id: 7711799-1-BKS — LCSD Sample Id: 7711799-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <10.0 | 250 | 252 | 101 | 253 | 101 | 90-110 | 0 | 20 | mg/kg | 09.22.2020 10:01 | |

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673152-001 — MS Sample Id: 673152-001 S — MSD Sample Id: 673152-001 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:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137776 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673161-001 — MS Sample Id: 673161-001 S — MSD Sample Id: 673161-001 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:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137717 — Matrix: Solid — Date Prep: 09.21.2020
MB Sample Id: 7711777-1-BLK — LCS Sample Id: 7711777-1-BKS — LCSD Sample Id: 7711777-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.0 | 1000 | 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 | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 88 | | 94 | | 93 | | 70-135 | % | 09.21.2020 12:16 |
| o-Terphenyl | 84 | | 83 | | 80 | | 70-135 | % | 09.21.2020 12:16 |

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137717 — Matrix: Solid — Date Prep: 09.21.2020
MB Sample Id: 7711777-1-BLK

| Parameter | MB Result | Units | Analysis Date | Flag |
|---|---|---|---|---|
| Motor Oil Range Hydrocarbons (MRO) | <50.0 | mg/kg | 09.21.2020 11:56 | |

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

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

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

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# QC Summary 673152

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137717 — Matrix: Soil — Date Prep: 09.21.2020
Parent Sample Id: 673097-001 — MS Sample Id: 673097-001 S — MSD Sample Id: 673097-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.1 | 1000 | 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 108 | | 107 | | 70-135 | % | 09.21.2020 13:17 |
| o-Terphenyl | 93 | | 93 | | 70-135 | % | 09.21.2020 13:17 |

**Analytical Method:** BTEX 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 — LCSD Sample Id: 7711754-1-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 %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 100 | | 99 | | 99 | | 70-130 | % | 09.21.2020 11:38 |
| 4-Bromofluorobenzene | 86 | | 89 | | 93 | | 70-130 | % | 09.21.2020 11:38 |

**Analytical Method:** BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3137712 — Matrix: Soil — Date Prep: 09.21.2020
Parent Sample Id: 673097-001 — MS Sample Id: 673097-001 S — MSD Sample Id: 673097-001 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 | 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 — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

# Chain of Custody

XENCO LABORATORIES

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

**Work Order No:** 673152

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

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Remuda South 25 #126H | Turn Around | |
| Project Number: | 012919260 | Routine | ☑ |
| P.O. Number: | Eddy | Rush: | |
| Sampler's Name: | William Mather | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | (Yes) No |
| Temperature (°C): | 7.6 / 7.4 | Thermometer ID | |
| Received Intact: | (Yes) No | T-NM-007 | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | 6 |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| PH01 | s | 9/21/2020 | 13:20 | 3' | 1 | x | x | x | Discrete |
| PH02 | s | 9/21/2020 | 13:29 | 3' | 1 | x | x | x | Discrete |
| PH03 | s | 9/21/2020 | 10:59 | 3' | 1 | x | x | x | Discrete |
| PH04 | s | 9/21/2020 | 12:10 | 3' | 1 | x | x | x | Discrete |
| PH05 | s | 9/21/2020 | 12:29 | 3' | 1 | x | x | x | Discrete |
| FS01 | s | 9/21/2020 | 14:46 | 1' | 1 | x | x | x | Composite |

**Work Order Notes**

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

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

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



| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| | Cloe Cuffaro | 9.21.20 16:31 | 2 | | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date 051418 Rev. 2018.1

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 09.21.2020 04.31.00 PM

**Work Order #:** 673152

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

**Temperature Measuring device used : T_NM_007**

| Sample Receipt Checklist | | Comments |
|---|---|---|
| #1 *Temperature of cooler(s)? | 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:** Cloe Clifton Date: 09.21.2020

Cloe Clifton

**Checklist reviewed by:** Jessica Kramer Date: 09.23.2020

Jessica Kramer

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# Certificate of Analysis Summary 673230

## LT Environmental, Inc., Arvada, CO

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

**Project Id:** 012919260
**Contact:** Dan Moir
**Project Location:** Eddy County

**Date Received in Lab:** Tue 09.22.2020 13:25
**Report Date:** 09.23.2020 14:07
**Project Manager:** Jessica Kramer

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 673230-001 | | 673230-002 | | 673230-003 | | 673230-004 | | | | | |
| | ***Field Id:*** | SS07 | | SS08 | | SS09 | | SS010 | | | | | |
| | ***Depth:*** | 0.5- ft | | 0.5- ft | | 0.5- ft | | 0.5- ft | | | | | |
| | ***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

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# 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)

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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,

Jessica Kramer

**Jessica Kramer**
Project Manager

*A Small Business and Minority Company*

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

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# Sample Cross Reference 673230

## LT Environmental, Inc., Arvada, CO

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 |

# CASE NARRATIVE

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***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

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS07** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-001 | Date Collected: | 09.21.2020 12:01 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 16:30 | Basis: | Wet Weight |
| Seq Number: | 3137842 | | | | |

| 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.22.2020 14:10 | Basis: | Wet 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 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | mg/kg | 09.22.2020 14:53 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | mg/kg | 09.22.2020 14:53 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | mg/kg | 09.22.2020 14:53 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | mg/kg | 09.22.2020 14:53 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS07** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-001 | Date Collected: | 09.21.2020 12:01 | Sample Depth: | 0.5 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 14:30 | Basis: | Wet Weight |
| Seq Number: | 3137826 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS08** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-002 | Date Collected: | 09.22.2020 10:22 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 16:30 | Basis: | Wet Weight |
| Seq Number: | 3137842 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **205** | 10.0 | mg/kg | 09.22.2020 16:43 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH by SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.22.2020 14:10 | Basis: | Wet Weight |
| Seq Number: | 3137782 | | | | |

| 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 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <50.1 | 50.1 | mg/kg | 09.22.2020 15:13 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <50.1 | 50.1 | mg/kg | 09.22.2020 15:13 | U | 1 |
| Total GRO-DRO | PHC628 | <50.1 | 50.1 | mg/kg | 09.22.2020 15:13 | U | 1 |
| Total TPH | PHC635 | <50.1 | 50.1 | mg/kg | 09.22.2020 15:13 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS08** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-002 | Date Collected: | 09.22.2020 10:22 | Sample Depth: | 0.5 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 14:30 | Basis: | Wet Weight |
| Seq Number: | 3137826 | | | | |

| Parameter | Cas Number | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS09** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-003 | Date Collected: | 09.22.2020 11:22 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 16:30 | Basis: | Wet 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.22.2020 14:10 | Basis: | Wet Weight |
| Seq Number: | 3137782 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <49.9 | 49.9 | mg/kg | 09.22.2020 15:33 | U | 1 |
| **Diesel Range Organics (DRO)** | C10C28DRO | **57.1** | 49.9 | mg/kg | 09.22.2020 15:33 | | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.9 | 49.9 | mg/kg | 09.22.2020 15:33 | U | 1 |
| **Total GRO-DRO** | PHC628 | **57.1** | 49.9 | mg/kg | 09.22.2020 15:33 | | 1 |
| **Total TPH** | PHC635 | **57.1** | 49.9 | mg/kg | 09.22.2020 15:33 | | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

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

| Parameter | Cas Number | 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: | **SS010** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-004 | Date Collected: | 09.21.2020 14:05 | Sample Depth: | 0.5 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 16:30 | Basis: | Wet 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 SW8015 Mod | | | Prep Method: | SW8015P |
| Tech: | DTH | | | % Moisture: | |
| Analyst: | DTH | Date Prep: | 09.22.2020 14:10 | Basis: | Wet 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 15:53 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <49.8 | 49.8 | mg/kg | 09.22.2020 15:53 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <49.8 | 49.8 | mg/kg | 09.22.2020 15:53 | U | 1 |
| Total GRO-DRO | PHC628 | <49.8 | 49.8 | mg/kg | 09.22.2020 15:53 | U | 1 |
| Total TPH | PHC635 | <49.8 | 49.8 | mg/kg | 09.22.2020 15:53 | 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 | |

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# Certificate of Analytical Results 673230

## LT Environmental, Inc., Arvada, CO

Remuda South 25 #126H

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **SS010** | Matrix: | Soil | Date Received: | 09.22.2020 13:25 |
| Lab Sample Id: | 673230-004 | Date Collected: | 09.21.2020 14:05 | Sample Depth: | 0.5 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5035A |
| Tech: | MAB | | | % Moisture: | |
| Analyst: | MAB | Date Prep: | 09.22.2020 14:30 | Basis: | Wet Weight |
| Seq Number: | 3137826 | | | | |

| Parameter | Cas Number | 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 | |

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# Flagging Criteria

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

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

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

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

**F** RPD exceeded lab control limits.

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

**U** Analyte was not detected.

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

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

**K** Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

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

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

# QC Summary 673230



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## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137842 — Matrix: Solid — Date Prep: 09.22.2020
MB Sample Id: 7711862-1-BLK — LCS Sample Id: 7711862-1-BKS — LCSD Sample Id: 7711862-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <10.0 | 250 | 252 | 101 | 252 | 101 | 90-110 | 0 | 20 | mg/kg | 09.22.2020 16:10 | |

**Analytical Method:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137842 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673230-001 — MS Sample Id: 673230-001 S — MSD Sample Id: 673230-001 SD

| Parameter | Parent Result | 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:** Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3137842 — Matrix: Soil — Date Prep: 09.22.2020
Parent Sample Id: 673274-003 — MS Sample Id: 673274-003 S — MSD Sample Id: 673274-003 SD

| Parameter | Parent Result | 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 SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137782 — Matrix: Solid — Date Prep: 09.22.2020
MB Sample Id: 7711834-1-BLK — LCS Sample Id: 7711834-1-BKS — LCSD Sample Id: 7711834-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.0 | 1000 | 913 | 91 | 912 | 91 | 70-135 | 0 | 35 | mg/kg | 09.22.2020 10:15 | |
| Diesel Range Organics (DRO) | <50.0 | 1000 | 918 | 92 | 926 | 93 | 70-135 | 1 | 35 | mg/kg | 09.22.2020 10:15 | |

| Surrogate | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 96 | | 101 | | 104 | | 70-135 | % | 09.22.2020 10:15 |
| o-Terphenyl | 91 | | 86 | | 90 | | 70-135 | % | 09.22.2020 10:15 |

**Analytical Method:** TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3137782 — Matrix: Solid — Date Prep: 09.22.2020
MB Sample Id: 7711834-1-BLK

| Parameter | MB Result | Units | Analysis Date | Flag |
|---|---|---|---|---|
| Motor Oil Range Hydrocarbons (MRO) | <50.0 | mg/kg | 09.22.2020 09:54 | |

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

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

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

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# QC Summary 673230

## LT Environmental, Inc.

Remuda South 25 #126H

**Analytical Method:** **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3137782 Matrix: Soil Date Prep: 09.22.2020
Parent Sample Id: 673161-001 MS Sample Id: 673161-001 S MSD Sample Id: 673161-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | <50.2 | 1000 | 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 108 | | 111 | | 70-135 | % | 09.22.2020 11:15 |
| o-Terphenyl | 94 | | 96 | | 70-135 | % | 09.22.2020 11:15 |

**Analytical Method:** **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3137826 Matrix: Solid Date Prep: 09.22.2020
MB Sample Id: 7711823-1-BLK LCS Sample Id: 7711823-1-BKS LCSD Sample Id: 7711823-1-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 | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 99 | | 99 | | 99 | | 70-130 | % | 09.22.2020 10:52 |
| 4-Bromofluorobenzene | 87 | | 86 | | 92 | | 70-130 | % | 09.22.2020 10:52 |

**Analytical Method:** **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3137826 Matrix: Soil Date Prep: 09.22.2020
Parent Sample Id: 673161-001 MS Sample Id: 673161-001 S MSD Sample Id: 673161-001 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 | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 99 | | 99 | | 70-130 | % | 09.22.2020 11:37 |
| 4-Bromofluorobenzene | 89 | | 89 | | 70-130 | % | 09.22.2020 11:37 |

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

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

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

# Chain of Custody

Work Order No: 673230

XENCO LABORATORIES

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

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

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Remuda South 25 #126H | Turn Around | |
| Project Number: | 0 12919260 | Routine | ☑ |
| P.O. Number: | Eddy | Rush: | |
| Sampler's Name: | William Mather | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | (Yes) No | |
| Temperature (°C): | 3.6/3.4 | Thermometer ID | TNM007 | |
| Received Intact: | (Yes) No | | | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | 4 | |

ANALYSIS REQUEST

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 0=8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| SS07 | s | 9/21/2020 | 12:01 | 0.5' | 1 | x | x | x | Discrete |
| SS08 | s | 9/22/2020 | 10:22 | 0.5' | 1 | x | x | x | Discrete |
| SS09 | s | 9/22/2020 | 11:22 | 0.5' | 1 | x | x | x | Discrete |
| SS10 | s | 9/21/2020 | 14:05 | 0.5' | 1 | x | x | x | Discrete |

**Work Order Notes**

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

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

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

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

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | 9/22/20 13:25 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** LT Environmental, Inc.

**Date/ Time Received:** 09.22.2020 01.25.00 PM

**Work Order #:** 673230

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

**Temperature Measuring device used : T_NM_007**

| Sample Receipt Checklist | | Comments |
|---|---|---|
| #1 *Temperature of cooler(s)? | 3.4 | |
| #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:** Cloe Clifton Date: 09.22.2020

Cloe Clifton

**Checklist reviewed by:** Jessica Kramer Date: 09.23.2020

Jessica Kramer

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

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

CONDITIONS

Action 14936

## CONDITIONS OF APPROVAL

| Operator: | OGRID: | Action Number: | Action Type: |
|---|---|---|---|
| XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707 | 5380 | 14936 | C-141 |

| OCD Reviewer | Condition |
|---|---|
| rhamlet | We have received your closure report and final C-141 for Incident #NRM2000237294 REMUDA SOUTH 25 STATE 126H, thank you. This closure is approved. |