701 Tradewinds Boulevard, Suite C
Midland, Texas 79706
Tel. 432-685-3898
www.ntglobal.com

June 25, 2019

NOT APPROVED

Mr. Dylan Rose-Coss
New Mexico Oil Conservation District
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Sante Fe, NM 87505

**Re: Remedial Action Report**
**Vaca Line Strike**
**1RP-5243**
**EOG Resources, Inc.**
**Site Location: Unit A, Sec. 36, T 24-S, R 33-E**
**(Lat 32.180794º, Long -103.518761º)**
**Lea County, New Mexico**

Dear Mr. Rose-Coss:

At the request of EOG Resources, Inc. (EOG), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document remedial action activities following a release at the Vaca Line Strike (Site). The Site is an active produced water line at the intersection of Vaca Lane and Resource Lane within Unit A, Section 36, Township 24 South, Range 33 East, approximately 19.6 miles northwest of Jal, New Mexico (Figures 1 and 2).

## Background

According to EOG personnel, on October 10, 2018, a release of approximately 233 barrels (bbls) of produced water occurred when a third-party contractor was backfilling an area of a new pipeline header install. While backfilling, a backhoe struck an existing 4-inch produced water line and caused the release of fluids. Personnel onsite initiated response actions by constructing earthen berms to contain the release. The pipeline flow was contained, and a vacuum truck was utilized to recover fluids. The amount of fluids recovered was estimated to be 55 bbls with a total of estimated loss of 178 bbls. See attached C-141 The spill trajectory is illustrated on Figure 3, attached.

On November 6, 2018, NTGE conducted Site assessment activities to determine the vertical and horizontal extents of impacts resulting from the release. A total of nine test pits were installed within the identified spill trajectory area to depths of 0 to 5 feet below ground surface (ft bgs) or until bucket refusal occurred. Samples were selected for testing by using the highest chloride field screen result and the lowest depth obtained during sampling. Test pit locations are illustrated on Figure 3, attached. Site Photographs taken at the time of sample collection are included in the attached photographic log. A Site Assessment Report (SAR) and Remedial Action Plan (RAP) was submitted to the New Mexico Oil Conservation District (NMOCD) on December 12, 2018.

## Remedial Actions

The RAP was approved on April 29, 2019 with stipulations from the NMOCD which can be found in the Correspondence section of the attachments. On May 28, 2019 excavation began in the areas of TP1, TP3, and TP4. These will be referred to as AOC1, AOC2, and AOC3 respectfully.

Soils in the areas of AOC1 and AOC 3 were excavated to a depth of 4 ft bgs and soils in AOC2 were excavated to a depth of 5 ft bgs. The bottoms and sidewalls were field screened using Hach Quantab Chloride Strips to ensure all impacts had been removed. Soil confirmation samples were collected from the sidewalls and bottoms of the excavation for lab analysis. Excavation and confirmation sample locations are illustrated on Figure 4, attached. Site Photographs taken at the time of excavation and sample collection are included in the attached photographic log.

Soil samples were placed directly into laboratory provided sample containers, stored on ice, and transported under proper chain-of-custody protocol to Xenco Laboratories for chemical analysis. Sample AOC1 CS1 was analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylene (BTEX) and chloride as requested by NMOCD. All other samples were analyzed for chlorides. Constituents of concern in all samples were below NMOCD regulatory limits with the exception of samples AOC3 SW1 (603 mg/kg) and AOC3 SW3 (649 mg/kg). Laboratory reports and chain of custody documents are attached. Soil analytical results are presented in Table 2, attached.

## Conclusions

After reviewing the laboratory results, it is determined that chloride levels at sample locations, AOC3 SW1 (603 mg/kg) and AOC3 SW3 (649 mg/kg) were still slightly above regulatory limits. As seen on Figure 4, the two samples (AOC3 SW1 and AOC3 SW3) are adjacent to active saltwater disposal lines and Resource Lane. Since the sample results are slightly above the NMOCD regulatory limits of 600 mg/kg (± 10%), and due to the proximity to active saltwater disposal lines and Resource Lane, EOG respectfully requests the NMOCD consider closure of the site and/or delayed remediation adjacent to the pipeline/road due to integrity issues.

If you have any questions regarding this report or need further information, please contact us at 432-685-3898.

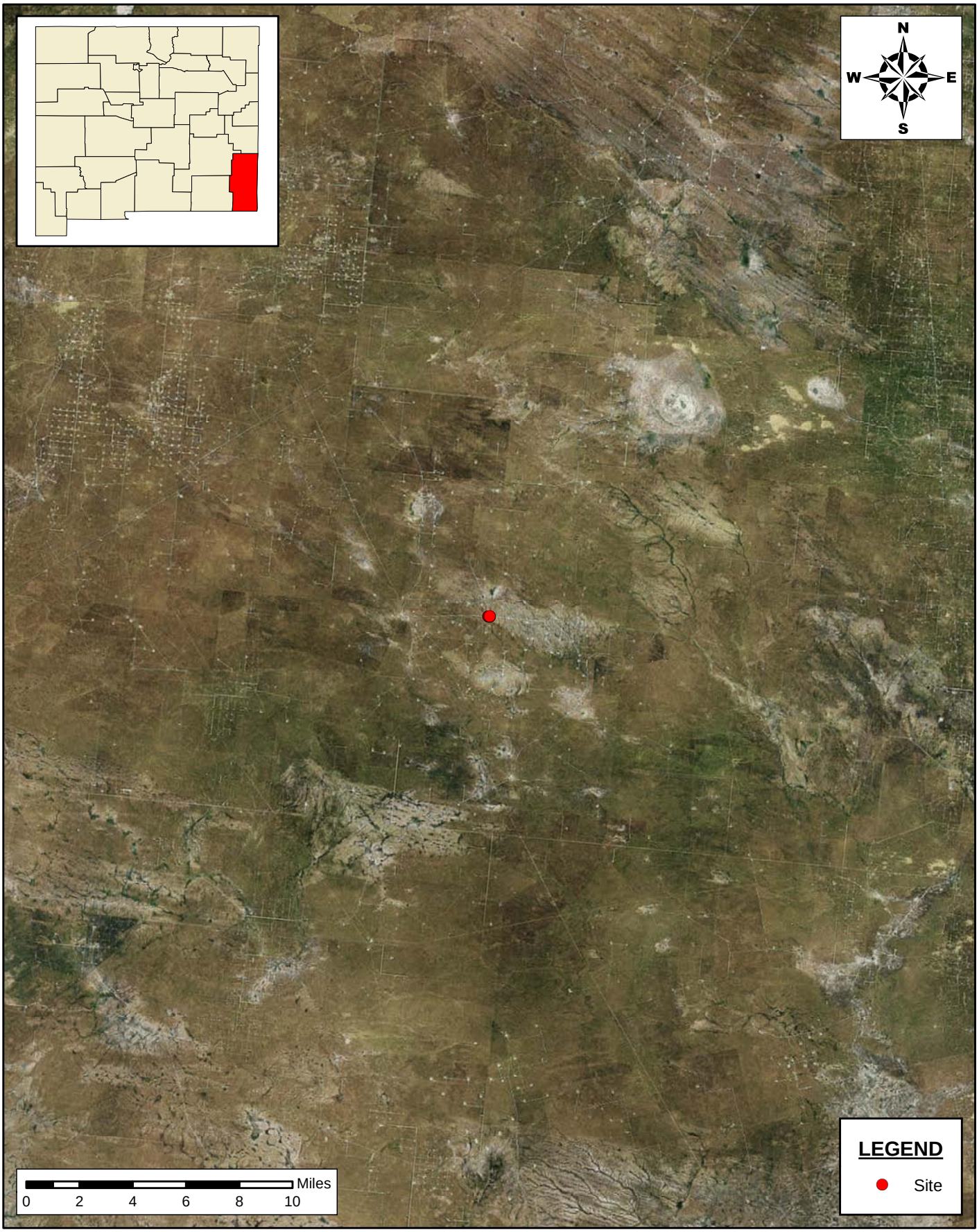
Sincerely,
**NTG Environmental**

Jay Loudermilk
Staff Scientist

Kari Lazo
Environmental Manager

Attachments: Figures
Photographic Log
Initial C-141 Form
Field Data Form
Laboratory Reports and Chain of Custody Documents

# Figures




**SITE LOCATION MAP**
**SITE ASSESSMENT REPORT**
EOG RESOURCES
VACA LINE STRIKE
LEA COUNTY, NEW MEXICO

SCALE: AS SHOWN | DATE: 12/11/2018 | PROJECT #: EGO0-R1805645

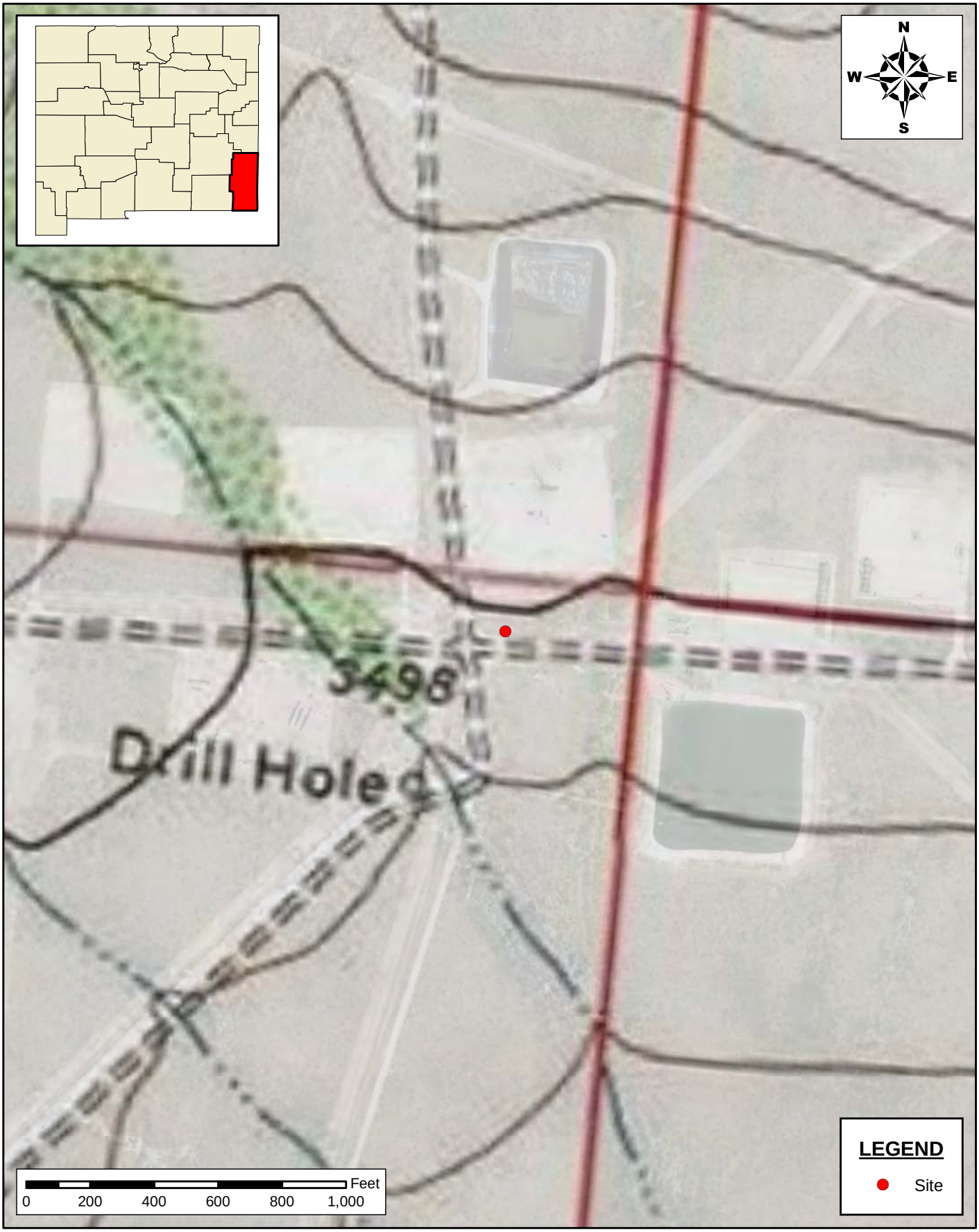
**New Tech Global Environmental, LLC**
911 Regional Park Drive
Houston, Texas 77060
T - 281.872.9300
F - 281.872.4521
Web: www.ntglobal.com

NOTES:

1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983 UTM Zone 15N

DRAWING NUMBER:
**FIGURE 1**
SHEET NUMBER:
**1 of 1**

Document Path: P:\2018 PROJECTS\EOG RESOURCES INC (EOG0)\RSC\EGO0-R1805645 VACA LANE LINESTRIKE\7- Figures\Geodatabase\EGO0-R1805645_FIG 1_SLMap_12112018.mxd




**AERIAL MAP**
**SITE ASSESSMENT REPORT**
EOG RESOURCES
VACA LINE STRIKE
LEA COUNTY, NEW MEXICO

SCALE: AS SHOWN | DATE: 12/11/2018 | PROJECT #: EGO0-R1805645

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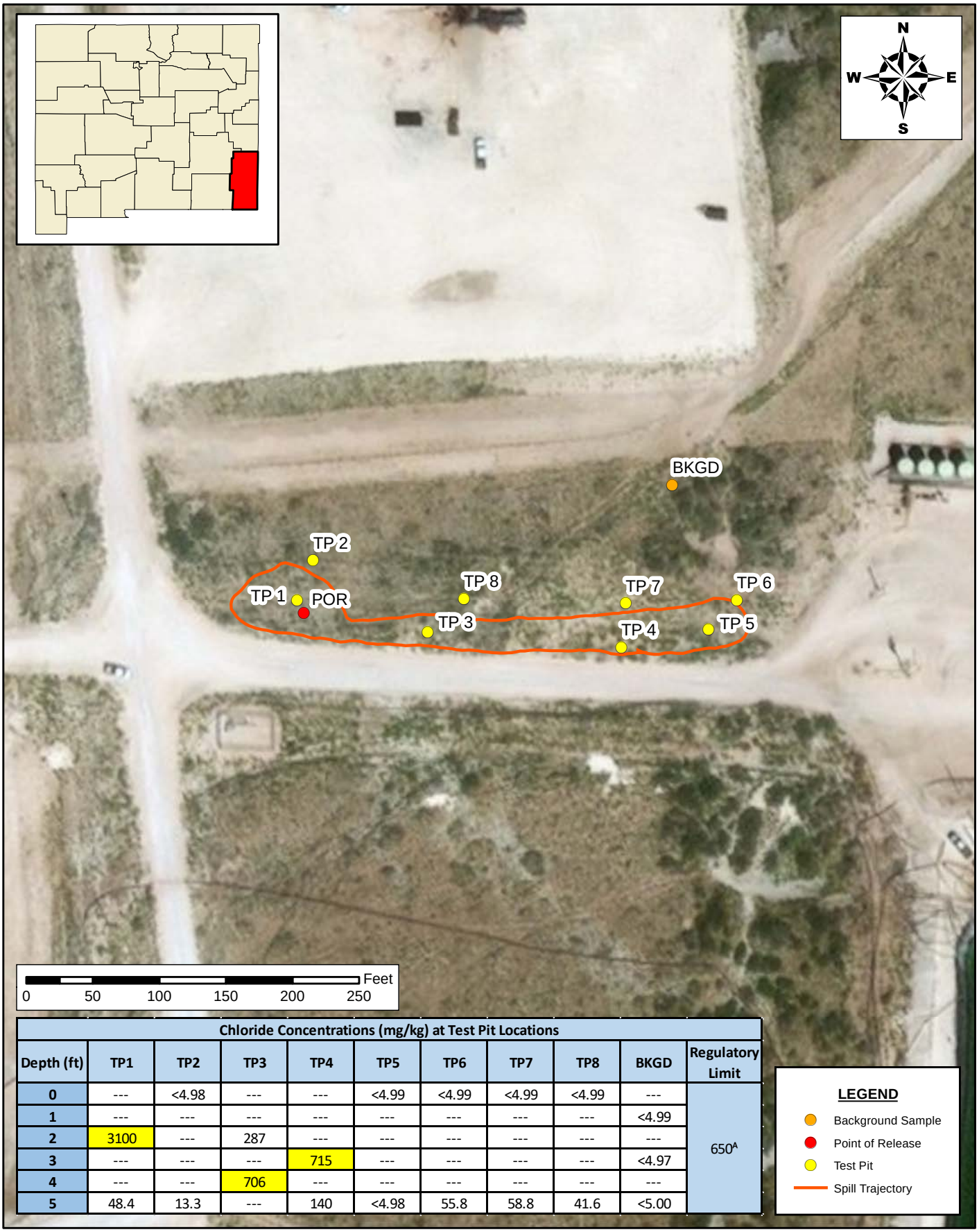
NOTES:
1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983 UTM Zone 15N

DRAWING NUMBER:
**FIGURE 2**
SHEET NUMBER:
**1 of 1**

Document Path: P:\2018 PROJECTS\EOG RESOURCES INC (EOG0)\RSC\EGO0-R1805645 VACA LANE LINESTRIKE\7- Figures\Geodatabase\EGO0-R1805645_FIG 1_TopoMap_12112018.mxd




**Chloride Concentrations (mg/kg) at Test Pit Locations**

| Depth (ft) | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TP8 | BKGD | Regulatory Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | --- | <4.98 | --- | --- | <4.99 | <4.99 | <4.99 | <4.99 | --- | 650[A] |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | <4.99 | |
| 2 | 3100 | --- | 287 | --- | --- | --- | --- | --- | --- | |
| 3 | --- | --- | --- | 715 | --- | --- | --- | --- | <4.97 | |
| 4 | --- | --- | 706 | --- | --- | --- | --- | --- | --- | |
| 5 | 48.4 | 13.3 | --- | 140 | <4.98 | 55.8 | 58.8 | 41.6 | <5.00 | |

**LEGEND**

- Background Sample
- Point of Release
- Test Pit
- Spill Trajectory

**AERIAL MAP**
**SITE ASSESSMENT REPORT**
EOG RESOURCES
VACA LINE STRIKE
LEA COUNTY, NEW MEXICO

SCALE: 1"=100' | DATE: 12/12/2018 | PROJECT #: EGO0-R1805645

**New Tech Global Environmental, LLC**
911 Regional Park Drive
Houston, Texas 77060
T - 281.872.9300
F - 281.872.4521
Web: www.ntglobal.com

NOTES:

1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983 UTM Zone 15N

DRAWING NUMBER:
**FIGURE 3**
SHEET NUMBER:
**1 of 1**

Document Path: P:\2018 PROJECTS\EOG RESOURCES INC (EOG0)\RSC\EGO0-R1805645 VACA LANE LINESTRIKE\7- Figures\Geodatabase\EGO0-R1805645_FIG 1_AerialMap_12112018.mxd

**Table 1 - Analytical Results – Site Assessment**
**Vaca Line Strike**
**EOG Resources**
**Lea County, New Mexico**

| Sample ID | Sample Depth (ft) | Date | Chloride (mg/kg) |
|---|---|---|---|
| TP1 | 2 | 11/6/2018 | 3100.00 |
| TP1 | 5 | 11/6/2018 | 48.40 |
| TP2 | 0 | 11/6/2018 | <4.98 |
| TP2 | 5 | 11/6/2018 | 13.30 |
| TP3 | 2 | 11/6/2018 | 287.00 |
| TP3 | 4 | 11/6/2018 | 706.00 |
| TP4 | 3 | 11/6/2018 | 715.00 |
| TP4 | 5 | 11/6/2018 | 140.00 |
| TP5 | 0 | 11/6/2018 | <4.99 |
| TP5 | 5 | 11/6/2018 | 81.50 |
| TP6 | 0 | 11/6/2018 | <4.99 |
| TP6 | 5 | 11/6/2018 | 55.80 |
| TP7 | 0 | 11/6/2018 | <4.99 |
| TP7 | 5 | 11/6/2018 | 58.80 |
| TP8 | 0 | 11/6/2018 | <4.99 |
| TP8 | 5 | 11/6/2018 | 41.60 |
| BKGD | 1 | 11/6/2018 | <4.99 |
| BKGD | 3 | 11/6/2018 | <4.97 |
| BKGD | 5 | 11/6/2018 | <5.00 |
| **Regulatory Limit** | | | **650[A]** |

— exceeded regulatory limit

mg/kg – milligram per kilogram

ft – feet

[A] – NMAC 19.15.29


Document Path: P:\2019 PROJECTS\EOG RESOURCES\EGO0-R1805645 VACA LANE LINESTRIKE\7- Figures\Geodatabase\EGO0-R1805645_FIG 4_ExcavationMap_06252019.mxd

**SAMPLE MAP**
**SITE ASSESSMENT REPORT**
EOG RESOURCES
VACA LINE STRIKE
LEA COUNTY, NEW MEXICO

SCALE: AS SHOWN | DATE: 06/25/2019 | PROJECT #: 191653


**New Tech Global Environmental, LLC**
911 Regional Park Drive
Houston, Texas 77060
T - 281.872.9300
F - 281.872.4521
Web: www.ntglobal.com


NOTES:
1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983 UTM Zone 15N

DRAWING NUMBER:
**FIGURE 4**
SHEET NUMBER:
**1 of 1**

**Table 2 - Analytical Results – Confirmation Samples**
**Vaca Line Strike**
**EOG Resources**
**Lea County, New Mexico**

| Sample ID | | Sample Depth (ft) | Date | Chloride (mg/kg) |
|---|---|---|---|---|
| AOC1 | CS1 | 4 | 5/28/2019 | 205.00 |
| | SW1 | 2 | 5/28/2019 | 227.00 |
| | SW2 | 2 | 5/28/2019 | 216.00 |
| | SW3 | 2 | 5/28/2019 | 590.00 |
| | SW4 | 2 | 5/28/2019 | 261.00 |
| AOC2 | CS1 | 5 | 5/28/2019 | 210.00 |
| | SW1 | 2.5 | 5/28/2019 | 260.00 |
| | SW2 | 2.5 | 5/28/2019 | 244.00 |
| | SW3 | 2.5 | 5/28/2019 | 571.00 |
| | SW4 | 2.5 | 5/28/2019 | 561.00 |
| AOC3 | CS1 | 4 | 5/28/2019 | 226.00 |
| | SW1 | 2 | 5/28/2019 | 603.00 |
| | SW2 | 2 | 5/28/2019 | 586.00 |
| | SW3 | 2 | 5/28/2019 | 649.00 |
| | SW4 | 2 | 5/28/2019 | 256.00 |
| **Regulatory Limit** | | | | **600[A]** |

— exceeded regulatory limit

mg/kg – milligram per kilogram

ft – feet

[A] – NMAC 19.15.29

# Photographic Log

# PHOTOGRAPHIC LOG

## EOG RESOURCES, INC

### Photograph No. 1

**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 10/31/2018

**Photographer:** Jay Loudermilk

**Description:**
View of spill trajectory looking east. Note Resource Lane to the south.


### Photograph No. 2

**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 11/06/2018

**Photographer:** Jay Loudermilk

**Description:**
View of point of release and area of TP 1 looking southwest. Note intersection of Vaca Lane (N to S) and Resource Land (E to W).


### Photograph No. 3

**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 10/31/2018

**Photographer:** Jay Loudermilk

**Description:**
View of spill trajectory looking west from area of TP5.

# PHOTOGRAPHIC LOG

**EOG RESOURCES, INC**

**Photograph No. 4**

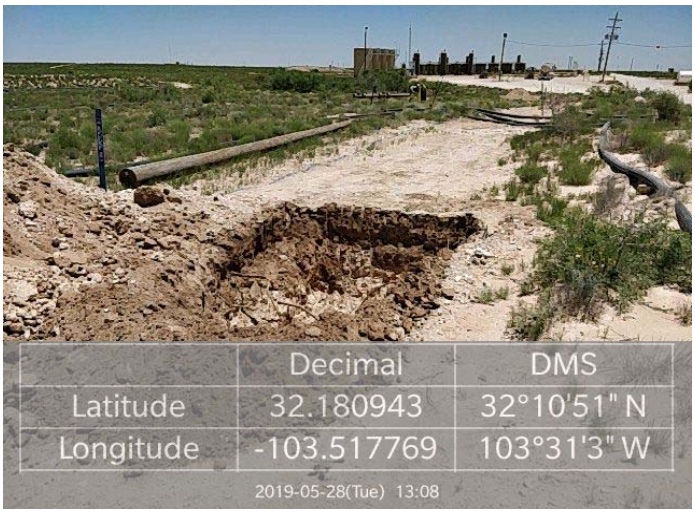
**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 05/28/2019

**Photographer:** Jay Loudermilk

**Description:**
View of AOC1 looking east.




**Photograph No. 5**

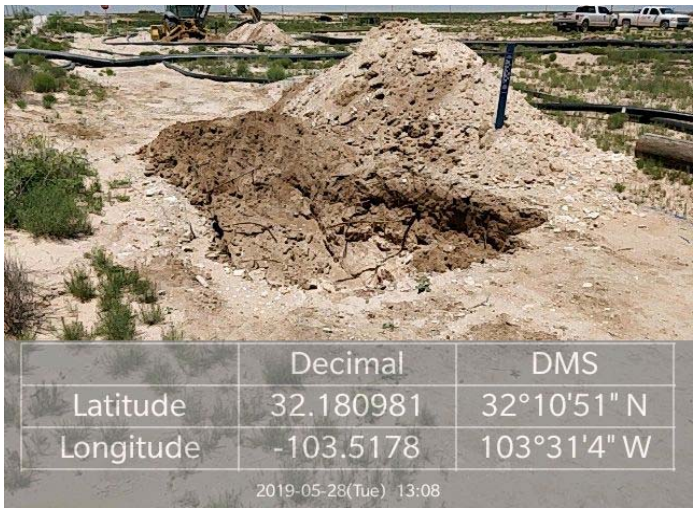
**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 05/28/2019

**Photographer:** Jay Loudermilk

**Description:**
View of AOC2 looking west.




**Photograph No. 6**

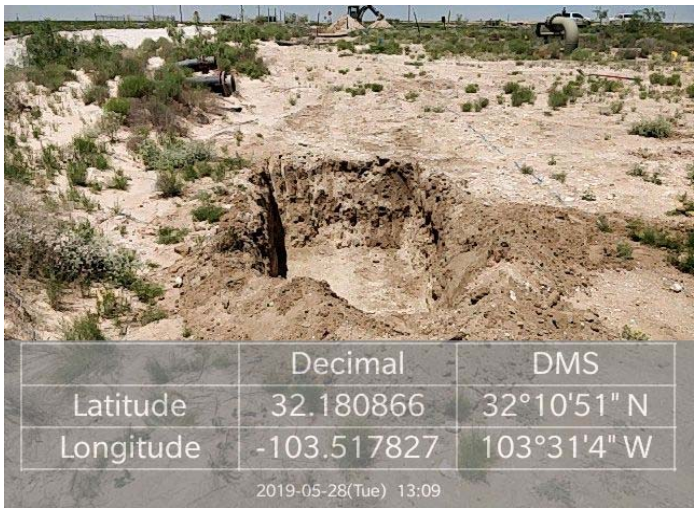
**Facility:** Vaca Line Strike

**County:** Lea, NM

**Date:** 05/28/2019

**Photographer:** Jay Loudermilk

**Description:**
View of AOC3 looking west.



# C-141 Form

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 | NOY1829558271 |
| District RP | 1RP-5243 |
| Facility ID | fOY1829556640 |
| Application ID | pOY1829559003 |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party: EOG Resources, Inc. | OGRID: 7377 |
| Contact Name: Jamon Hohensee | Contact Telephone: 432-556-8074 |
| Contact email: jamon_hohensee@eogresources.com | Incident # *(assigned by OCD)* NOY1829558271 |
| Contact mailing address: 5509 Champions Drive, Midland Texas 79706 | |

## Location of Release Source

Latitude 32.1808 Longitude -103.5189
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name: Vaca Lane line strike | Site Type: EOG ROW |
| Date Release Discovered: 10-10-18 | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| A | 36 | 24S | 33E | |

State minerals

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) | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls)233 | Volume Recovered (bbls)55 |
| | 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: A 3rd party contractor was backfilling an area where a pipeline header was installed. While backfilling, the bucket of the backhoe caught a 4" produced water line and caused a release of fluids. The pipeline flow was stopped and a vacuum truck was used to recover fluids. Earthen berms were used to help contain the release. The spill area as calculated by a GPS track of the perimeter was approximately 4,517 square feet. With an average depth of 1' and soil porosity for a fine sandy loam at .29 we estimated that 233 bbls of produced water was released and approximately 55 bbls were recovered by vacuum truck.

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | |
| 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>Yes, over 25bbls of fluids released. |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br>Jamon Hohensee sent an email to Olivia Yu and Jim Griswold on 10/11/18 concerning the release. | |

## 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:

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: Jamon Hohensee Title: Environmental Rep.

Signature: Jamon Hohensee Date: 10-22-18

email: jamon_hohensee@eogresources.com Telephone: 432-556-8074

**OCD Only**

Received by: RECEIVED By Olivia Yu at 4:27 pm, Oct 22, 2018 Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | |
| 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? | _____ (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

| | |
|---|---|
| Incident ID | |
| 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: Jay Louvermilk Title: Staff Scientist

Signature: Date: 12/13/18

email: jlouvermilk@ntglobal.com Telephone: 432-312-8049

**OCD Only**

Received by: Date:

State of New Mexico
Oil Conservation Division

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

# Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jay Loudermilk Title: Staff Scientist

Signature: Date: 12/13/18

email: jloudermilk@ntglobal.com Telephone: 432-312-8049

**OCD Only**

Received by: Date:

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

Signature: Date:

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | |
| 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: Jay Lowdermilk Title: Staff Scientist

Signature: Date: 6/25/19

email: jlowdermilk@ntglobal.com Telephone: (325) 998-0285

**OCD Only**

Received by: Date:

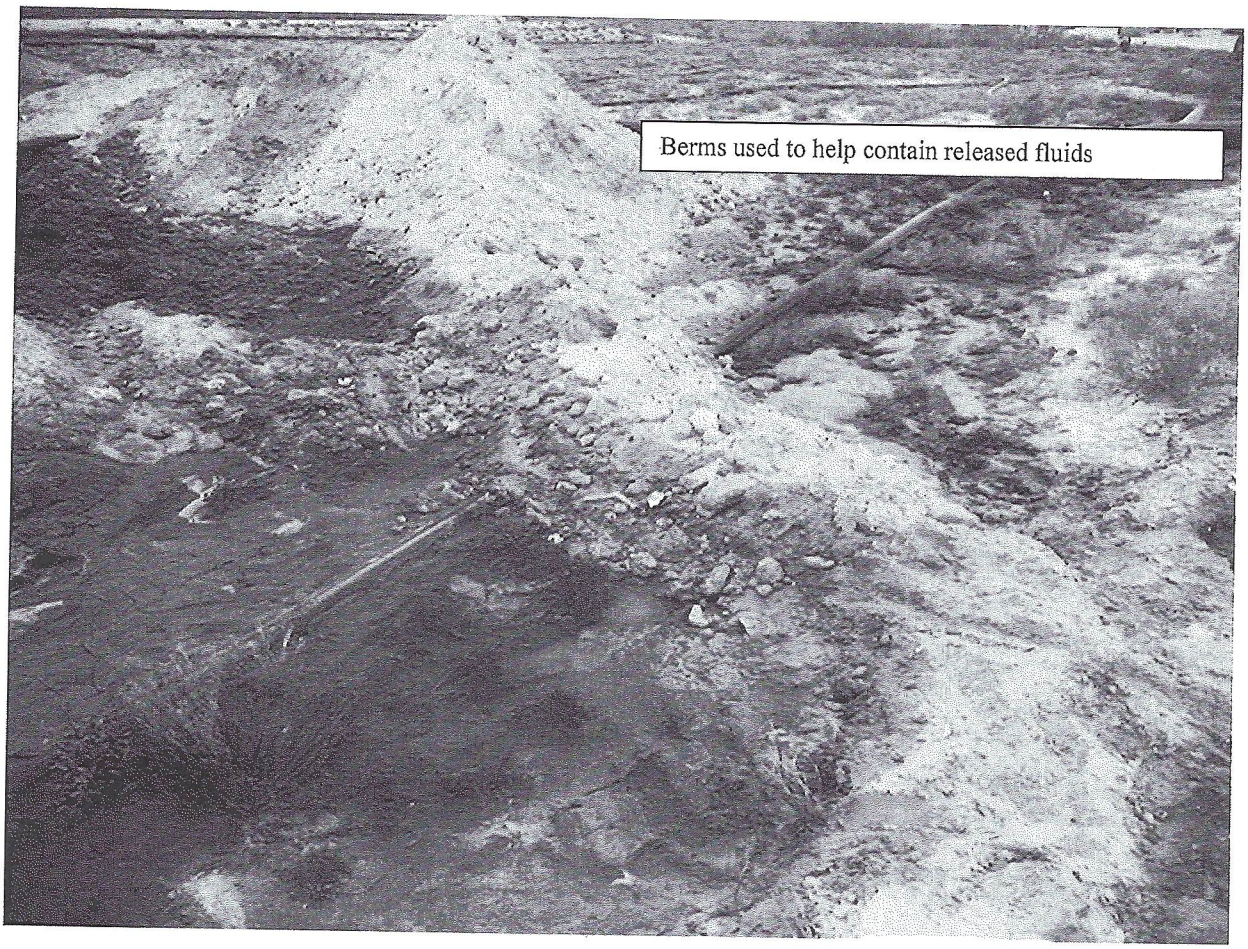
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance 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 | |
| District RP | |
| Facility ID | |
| Application ID | |



# Field Data Form

# DAILY FIELD ACTIVITY REPORT

NEW TECH GLOBAL ENVIRONMENTAL, LLC

NTG ENVIRONMENTAL

| Date | Project No. | Project Name |
|---|---|---|
| 5/28/19 | Vaca Lineshrike | |
| **NTGE Personnel** | **Client** | **Location** |
| SL | FOG | Lat: Long: |

| Time | Description of Activities | | |
|---|---|---|---|
| 10:45 | AOC2 CS1 | 1.4 | <300 |
| 10:50 | AOC2 SW1 | 1.6 | <300 |
| 10:55 | AOC2 SW2 | 1.2 | <300 |
| 11:00 | AOC2 SW3 | 2.4 | 410 |
| 11:05 | AOC2 SW4 | 2.6 | 510 |
| | | | |
| 11:30 | AOC3 CS1 | 1.4 | <300 |
| 11:35 | AOC3 SW1 | 2.4 | 410 |
| 11:40 | AOC3 SW2 | 2.4 | 410 |
| 11:45 | AOC3 SW3 | 2.8 | 610 |
| 11:50 | AOC3 SW4 | 1.6 | <300 |
| | | | |
| 12:15 | AOC1 CS1 | 1.8 | <300 |
| 12:20 | AOC1 SW1 | 1.8 | <300 |
| 12:25 | AOC1 SW2 | 1.4 | <300 |
| 12:30 | AOC1 SW3 | 2.6 | 510 |
| 12:35 | AOC1 SW4 | 1.4 | <300 |

# FIELD SCREENING

NTG ENVIRONMENTAL, LLC

| Date | Project No. | Project Name |
|---|---|---|
| 11/6/18 | EOG0-R1805645 | Vaca Line Strike |
| Page 1 of 2 | Client EOG | Location Lea, NM |

| Sampling Time | Sample ID | Depth | PID Reading | Strip Reading (mg/kg) | Strip Reading | Strip Range(LR/HR) |
|---|---|---|---|---|---|---|
| 10:00 | TP1 | 0' | | <320 | 0.8 | LR |
| 10:05 | | 1' | | 500 | 2.2 | LR |
| 10:10 | | 2' | | 3700 | 6.6 | LR |
| 10:15 | | 3' | | 3020 | 6.0 | LR |
| 10:20 | | 4' | | <320 | 0.8 | LR |
| 10:25 | | 5' | | <320 | 0.4 | LR |
| 10:30 | TP2 | 0 | | <320 | 0.4 | LR |
| 10:35 | | 1 | | <320 | 0.4 | LR |
| 10:40 | | 2 | | <320 | 0.4 | LR |
| 10:45 | | 3 | | <320 | 0.6 | LR |
| 10:50 | TP 3 | 0 | | <320 | 0.6 | LR |
| 10:55 | | 1 | | 2820 | 5.8 | LR |
| 11:00 | | 2 | | 740 | 2.9 | LR |
| 11:05 | | 3 | | 570 | 2.4 | LR |
| 11:10 | | 4 | | 370 | 1.8 | LR |
| 11:15 | TP4 | 0 | | <320 | 0.6 | LR |
| 11:20 | | 1 | | 320 | 1.6 | LR |
| 11:25 | | 2 | | 320 | 1.6 | LR |
| 11:30 | | 3 | | 650 | 2.6 | LR |
| 11:35 | | 4 | | <320 | 1.4 | LR |
| 11:40 | | 5 | | <320 | 0.8 | LR |
| 11:45 | TP5 | 0 | | <320 | 0.2 | LR |
| 11:50 | | 1 | | <320 | 1.0 | LR |
| 11:55 | | 2 | | <320 | 0.8 | LR |
| 12:00 | | 3 | | <320 | 0.6 | LR |

Comments

Reported By (print, sign, date)

# FIELD SCREENING

NTG ENVIRONMENTAL, LLC

| Date | Project No. | Project Name |
|---|---|---|
| Page 2 of 2 | Client | Location |

| Sampling Time | Sample ID | Depth | PID Reading | Strip Reading (mg/kg) | Strip Reading | Strip Range(LR/HR) |
|---|---|---|---|---|---|---|
| 12:05 | TP5 | 4 | | <320 | 0.8 | LR |
| 12:10 | | 5 | | <320 | 0.8 | LR |
| 12:15 | TP6 | 0 | | | 0.2 | LR |
| 12:20 | | 1 | | | 0.0 | LR |
| 12:25 | | 2 | | | 0.2 | LR |
| 12:30 | | 3 | | | 0.6 | LR |
| 12:35 | | 4 | | | 0.4 | |
| 12:40 | | 5 | | <320 | 0.6 | LR |
| 12:45 | TP7 | 0 | | | 0.0 | LR |
| 12:50 | | 1 | | | 0.4 | LR |
| 12:55 | | 2 | | | 0.6 | LR |
| 13:00 | | 3 | | | 0.4 | LR |
| 13:05 | | 4 | | | 0.4 | LR |
| 13:10 | | 5 | | | 0.8 | LR |
| 13:15 | TP2 | 0 | | <320 | 0.6 | LR |
| 13:20 | | 1 | | | 0.8 | LR |
| 13:25 | | 2 | | | 0.8 | LR |
| 13:30 | | 3 | | | 0.8 | LR |
| 13:35 | | 4 | | | 0.8 | LR |
| 13:40 | | 5 | | | 0.8 | LR |
| 13:45 | BKGD | 0 | | | 0.0 | |
| 13:50 | | 1 | | | 0.2 | |
| 13:55 | | 2 | | | 0.6 | |
| 14:00 | | 3 | | | 0.8 | |
| 14:05 | | 4 | | | 0.6 | |
| Comments<br>14:10 | | 5 | | | Reported By (print, sign, date)<br>0.6 | |

Project Number: _____

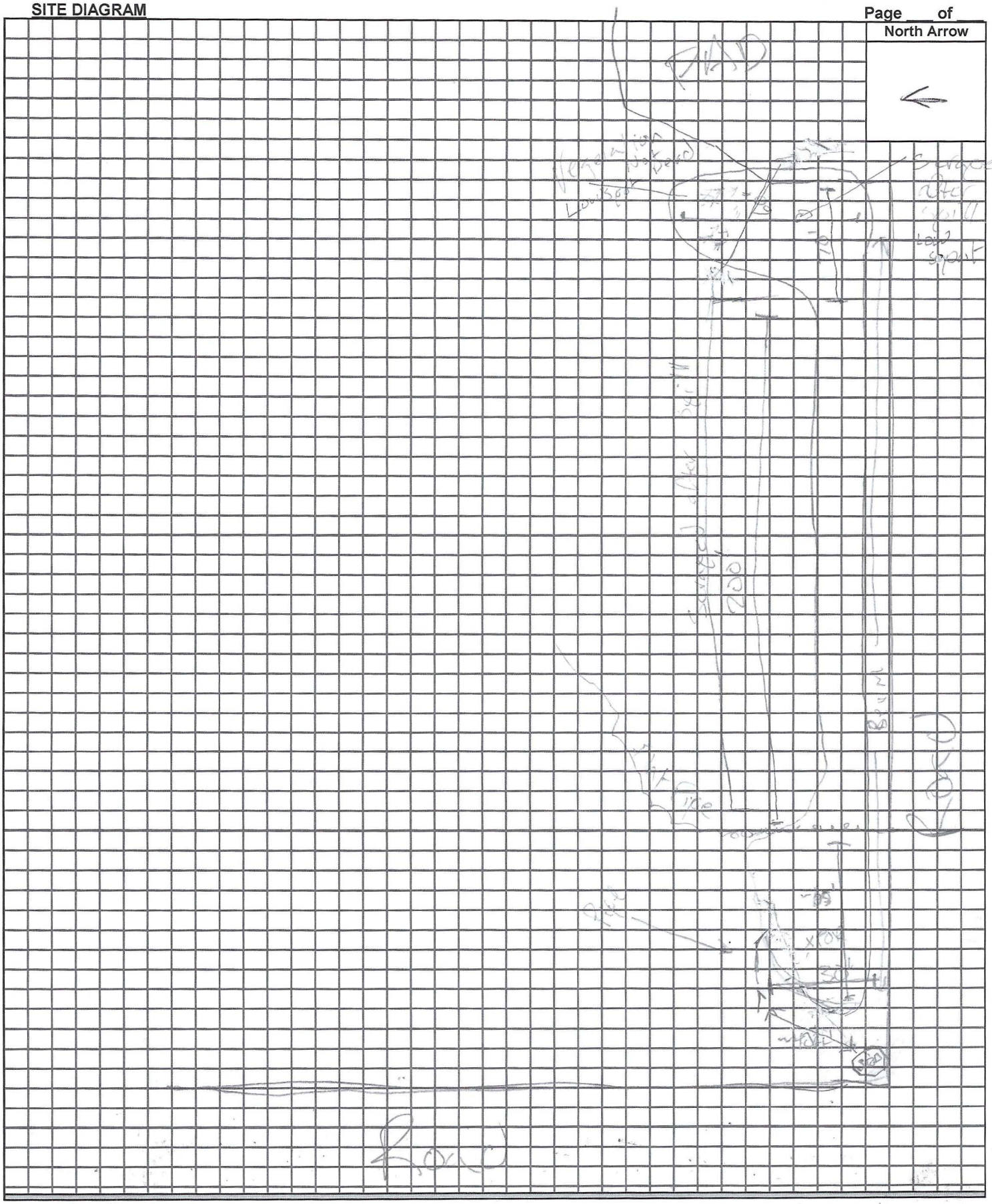
Date: _____

NTG ENVIRONMENTAL

**SITE DIAGRAM**

Page ___ of ___

North Arrow



# Laboratory Reports and Chain of Custody Document

# Certificate of Analysis Summary 626062

## NT Global, Midland, TX

## Project Name: Vaca Linestrike

**Project Id:**
**Contact:** Jay Loudermilk
**Project Location:**

**Date Received in Lab:** Fri May-31-19 08:32 am
**Report Date:** 04-JUN-19
**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 626062-001 | | 626062-002 | | 626062-003 | | 626062-004 | | 626062-005 | | 626062-006 | |
| | ***Field Id:*** | A0C1 CS1 4' | | A0C1 SW1 2' | | A0C1 SW2 2' | | A0C1 SW3 2' | | A0C1 SW4 2' | | A0C2 CS1 5' | |
| | ***Depth:*** | 4- ft | | 2- ft | | 2- ft | | 2- ft | | 2- ft | | 5- ft | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | May-28-19 12:15 | | May-28-19 12:20 | | May-28-19 12:25 | | May-28-19 12:30 | | May-28-19 12:35 | | May-28-19 10:45 | |
| **BTEX by EPA 8021B** | ***Extracted:*** | May-31-19 16:45 | | | | | | | | | | | |
| | ***Analyzed:*** | Jun-01-19 17:26 | | | | | | | | | | | |
| | ***Units/RL:*** | mg/kg | RL | | | | | | | | | | |
| Benzene | | <0.00202 | 0.00202 | | | | | | | | | | |
| Toluene | | <0.00202 | 0.00202 | | | | | | | | | | |
| Ethylbenzene | | <0.00202 | 0.00202 | | | | | | | | | | |
| m,p-Xylenes | | <0.00403 | 0.00403 | | | | | | | | | | |
| o-Xylene | | <0.00202 | 0.00202 | | | | | | | | | | |
| Total Xylenes | | <0.00202 | 0.00202 | | | | | | | | | | |
| Total BTEX | | <0.00202 | 0.00202 | | | | | | | | | | |
| **Chloride by EPA 300** | ***Extracted:*** | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | |
| | ***Analyzed:*** | May-31-19 16:25 | | May-31-19 16:47 | | May-31-19 16:54 | | May-31-19 17:01 | | May-31-19 17:18 | | May-31-19 17:40 | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 205 | 5.00 | 227 | 25.1 | 216 | 4.98 | 590 | 5.00 | 261 | 5.05 | 210 | 24.9 |
| **TPH By SW8015 Mod** | ***Extracted:*** | May-31-19 16:00 | | | | | | | | | | | |
| | ***Analyzed:*** | Jun-01-19 03:15 | | | | | | | | | | | |
| | ***Units/RL:*** | mg/kg | RL | | | | | | | | | | |
| Gasoline Range Hydrocarbons (GRO) | | <14.9 | 14.9 | | | | | | | | | | |
| Diesel Range Organics (DRO) | | <14.9 | 14.9 | | | | | | | | | | |
| Motor Oil Range Hydrocarbons (MRO) | | <14.9 | 14.9 | | | | | | | | | | |
| Total TPH | | <14.9 | 14.9 | | | | | | | | | | |





Holly Taylor
Project Manager

# Certificate of Analysis Summary 626062

## NT Global, Midland, TX

## Project Name: Vaca Linestrike

**Project Id:**
**Contact:** Jay Loudermilk
**Project Location:**

**Date Received in Lab:** Fri May-31-19 08:32 am
**Report Date:** 04-JUN-19
**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 626062-007 | | 626062-008 | | 626062-009 | | 626062-010 | | 626062-011 | | 626062-012 | |
| | ***Field Id:*** | A0C2 SW1 2.5' | | A0C2 SW2 2.5' | | A0C2 SW3 2.5' | | A0C2 SW4 2.5' | | A0C3 CS1 4' | | A0C3 SW1 2' | |
| | ***Depth:*** | 2.5- ft | | 2.5- ft | | 2.5- ft | | 2.5- ft | | 4- ft | | 2- ft | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | May-28-19 10:50 | | May-28-19 10:55 | | May-28-19 11:00 | | May-28-19 11:05 | | May-28-19 11:30 | | May-28-19 11:35 | |
| **Chloride by EPA 300** | ***Extracted:*** | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | |
| | ***Analyzed:*** | May-31-19 17:47 | | May-31-19 17:55 | | May-31-19 18:02 | | May-31-19 18:09 | | May-31-19 18:16 | | Jun-03-19 09:45 | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 260 | 24.8 | 244 | 4.95 | 571 | 5.04 | 561 | 4.99 | 226 | 5.00 | 603 | 4.97 |





Holly Taylor
Project Manager

# Certificate of Analysis Summary 626062

## NT Global, Midland, TX

## Project Name: Vaca Linestrike

**Project Id:**
**Contact:** Jay Loudermilk
**Project Location:**

**Date Received in Lab:** Fri May-31-19 08:32 am
**Report Date:** 04-JUN-19
**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 626062-013 | | 626062-014 | | 626062-015 | | | | | | |
| | ***Field Id:*** | A0C3 SW2 2' | | A0C3 SW3 2' | | A0C3 SW4 2' | | | | | | |
| | ***Depth:*** | 2- ft | | 2- ft | | 2- ft | | | | | | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | | | | | |
| | ***Sampled:*** | May-28-19 11:40 | | May-28-19 11:45 | | May-28-19 11:50 | | | | | | |
| **Chloride by EPA 300** | ***Extracted:*** | May-31-19 15:30 | | May-31-19 15:30 | | May-31-19 15:30 | | | | | | |
| | ***Analyzed:*** | May-31-19 18:45 | | May-31-19 19:07 | | May-31-19 19:14 | | | | | | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | | | | | |
| Chloride | | 586 | 4.96 | 649 | 4.95 | 256 | 5.02 | | | | | |





Holly Taylor
Project Manager

# Analytical Report 626062

## for

## NT Global

**Project Manager: Jay Loudermilk**

**Vaca Linestrike**

**04-JUN-19**

Collected By: Client

**1211 W. Florida Ave**
**Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04-JUN-19

Project Manager: **Jay Loudermilk**
**NT Global**
701 Tradewinds Blvd
Midland, TX 79706

Reference: XENCO Report No(s): **626062**
**Vaca Linestrike**
Project Address:

**Jay Loudermilk**:

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) 626062. 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. 626062 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,

Holly Taylor

**Holly Taylor**
Project Manager

# Sample Cross Reference 626062

## NT Global, Midland, TX

Vaca Linestrike

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|---|---|---|---|---|
| A0C1 CS1 4' | S | 05-28-19 12:15 | 4 ft | 626062-001 |
| A0C1 SW1 2' | S | 05-28-19 12:20 | 2 ft | 626062-002 |
| A0C1 SW2 2' | S | 05-28-19 12:25 | 2 ft | 626062-003 |
| A0C1 SW3 2' | S | 05-28-19 12:30 | 2 ft | 626062-004 |
| A0C1 SW4 2' | S | 05-28-19 12:35 | 2 ft | 626062-005 |
| A0C2 CS1 5' | S | 05-28-19 10:45 | 5 ft | 626062-006 |
| A0C2 SW1 2.5' | S | 05-28-19 10:50 | 2.5 ft | 626062-007 |
| A0C2 SW2 2.5' | S | 05-28-19 10:55 | 2.5 ft | 626062-008 |
| A0C2 SW3 2.5' | S | 05-28-19 11:00 | 2.5 ft | 626062-009 |
| A0C2 SW4 2.5' | S | 05-28-19 11:05 | 2.5 ft | 626062-010 |
| A0C3 CS1 4' | S | 05-28-19 11:30 | 4 ft | 626062-011 |
| A0C3 SW1 2' | S | 05-28-19 11:35 | 2 ft | 626062-012 |
| A0C3 SW2 2' | S | 05-28-19 11:40 | 2 ft | 626062-013 |
| A0C3 SW3 2' | S | 05-28-19 11:45 | 2 ft | 626062-014 |
| A0C3 SW4 2' | S | 05-28-19 11:50 | 2 ft | 626062-015 |

**Sample receipt non conformances and comments:**

6/4/2019 Method Blank for DRO in Batch 3090915 of 9.4 mg/kg was accepted because it is below the RL of 14.9 mg/kg.

**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3090847 Chloride by EPA 300

Lab Sample ID 626062-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 626062-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015.

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

Batch: LBA-3090888 BTEX by EPA 8021B

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

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 CS1 4'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-001 | Date Collected: | 05.28.19 12.15 | Sample Depth: | 4 ft |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **205** | 5.00 | mg/kg | 05.31.19 16.25 | | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Analytical Method: | TPH By SW8015 Mod | | | Prep Method: | TX1005P |
| Tech: | ARM | | | % Moisture: | |
| Analyst: | ARM | Date Prep: | 05.31.19 16.00 | Basis: | Wet Weight |
| Seq Number: | 3090915 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Gasoline Range Hydrocarbons (GRO) | PHC610 | <14.9 | 14.9 | mg/kg | 06.01.19 03.15 | U | 1 |
| Diesel Range Organics (DRO) | C10C28DRO | <14.9 | 14.9 | mg/kg | 06.01.19 03.15 | U | 1 |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835 | <14.9 | 14.9 | mg/kg | 06.01.19 03.15 | U | 1 |
| Total TPH | PHC635 | <14.9 | 14.9 | mg/kg | 06.01.19 03.15 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 111-85-3 | 94 | % | 70-135 | 06.01.19 03.15 | |
| o-Terphenyl | 84-15-1 | 93 | % | 70-135 | 06.01.19 03.15 | |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 CS1 4'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-001 | Date Collected: | 05.28.19 12.15 | Sample Depth: | 4 ft |
| Analytical Method: | BTEX by EPA 8021B | | | Prep Method: | SW5030B |
| Tech: | SCM | | | % Moisture: | |
| Analyst: | SCM | Date Prep: | 05.31.19 16.45 | Basis: | Wet Weight |
| Seq Number: | 3090888 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Benzene | 71-43-2 | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |
| Toluene | 108-88-3 | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |
| Ethylbenzene | 100-41-4 | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |
| m,p-Xylenes | 179601-23-1 | <0.00403 | 0.00403 | mg/kg | 06.01.19 17.26 | U | 1 |
| o-Xylene | 95-47-6 | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |
| Total Xylenes | 1330-20-7 | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |
| Total BTEX | | <0.00202 | 0.00202 | mg/kg | 06.01.19 17.26 | U | 1 |

| Surrogate | Cas Number | % Recovery | Units | Limits | Analysis Date | Flag |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 460-00-4 | 130 | % | 70-130 | 06.01.19 17.26 | |
| 1,4-Difluorobenzene | 540-36-3 | 96 | % | 70-130 | 06.01.19 17.26 | |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 SW1 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-002 | Date Collected: | 05.28.19 12.20 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **227** | 25.1 | mg/kg | 05.31.19 16.47 | | 5 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 SW2 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-003 | Date Collected: | 05.28.19 12.25 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **216** | 4.98 | mg/kg | 05.31.19 16.54 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 SW3 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-004 | Date Collected: | 05.28.19 12.30 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **590** | 5.00 | mg/kg | 05.31.19 17.01 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C1 SW4 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-005 | Date Collected: | 05.28.19 12.35 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **261** | 5.05 | mg/kg | 05.31.19 17.18 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C2 CS1 5'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-006 | Date Collected: | 05.28.19 10.45 | Sample Depth: | 5 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **210** | 24.9 | mg/kg | 05.31.19 17.40 | | 5 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C2 SW1 2.5'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-007 | Date Collected: | 05.28.19 10.50 | Sample Depth: | 2.5 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **260** | 24.8 | mg/kg | 05.31.19 17.47 | | 5 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C2 SW2 2.5'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-008 | Date Collected: | 05.28.19 10.55 | Sample Depth: | 2.5 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **244** | 4.95 | mg/kg | 05.31.19 17.55 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C2 SW3 2.5'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-009 | Date Collected: | 05.28.19 11.00 | Sample Depth: | 2.5 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **571** | 5.04 | mg/kg | 05.31.19 18.02 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C2 SW4 2.5'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-010 | Date Collected: | 05.28.19 11.05 | Sample Depth: | 2.5 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **561** | 4.99 | mg/kg | 05.31.19 18.09 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C3 CS1 4'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-011 | Date Collected: | 05.28.19 11.30 | Sample Depth: | 4 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **226** | 5.00 | mg/kg | 05.31.19 18.16 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C3 SW1 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-012 | Date Collected: | 05.28.19 11.35 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **603** | 4.97 | mg/kg | 06.03.19 09.45 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C3 SW2 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-013 | Date Collected: | 05.28.19 11.40 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **586** | 4.96 | mg/kg | 05.31.19 18.45 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C3 SW3 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-014 | Date Collected: | 05.28.19 11.45 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **649** | 4.95 | mg/kg | 05.31.19 19.07 | | 1 |

# Certificate of Analytical Results 626062

## NT Global, Midland, TX

Vaca Linestrike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **A0C3 SW4 2'** | Matrix: | Soil | Date Received: | 05.31.19 08.32 |
| Lab Sample Id: | 626062-015 | Date Collected: | 05.28.19 11.50 | Sample Depth: | 2 ft |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 05.31.19 15.30 | Basis: | Wet Weight |
| Seq Number: | 3090847 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **256** | 5.02 | mg/kg | 05.31.19 19.14 | | 1 |

# 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 626062

## NT Global

Vaca Linestrike

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3090847 Matrix: Solid Date Prep: 05.31.19
MB Sample Id: 7679000-1-BLK LCS Sample Id: 7679000-1-BKS LCSD Sample Id: 7679000-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <0.858 | 250 | 234 | 94 | 234 | 94 | 90-110 | 0 | 20 | mg/kg | 05.31.19 16:10 | |

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3090847 Matrix: Soil Date Prep: 05.31.19
Parent Sample Id: 626062-001 MS Sample Id: 626062-001 S MSD Sample Id: 626062-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 205 | 250 | 381 | 70 | 381 | 70 | 90-110 | 0 | 20 | mg/kg | 05.31.19 16:32 | X |

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3090847 Matrix: Soil Date Prep: 05.31.19
Parent Sample Id: 626062-011 MS Sample Id: 626062-011 S MSD Sample Id: 626062-011 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 226 | 250 | 417 | 76 | 418 | 77 | 90-110 | 0 | 20 | mg/kg | 05.31.19 18:24 | X |

**Analytical Method:** **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090915 Matrix: Solid Date Prep: 05.31.19
MB Sample Id: 7679063-1-BLK LCS Sample Id: 7679063-1-BKS LCSD Sample Id: 7679063-1-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) | <8.00 | 1000 | 1160 | 116 | 1190 | 119 | 70-135 | 3 | 20 | mg/kg | 05.31.19 21:42 | |
| Diesel Range Organics (DRO) | 9.40 | 1000 | 1130 | 113 | 1120 | 112 | 70-135 | 1 | 20 | mg/kg | 05.31.19 21:42 | |

| Surrogate | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 99 | | 130 | | 126 | | 70-135 | % | 05.31.19 21:42 |
| o-Terphenyl | 99 | | 129 | | 117 | | 70-135 | % | 05.31.19 21:42 |

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 626062

## NT Global

Vaca Linestrike

**Analytical Method:** **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3090915 Matrix: Soil Date Prep: 05.31.19
Parent Sample Id: 626056-001 MS Sample Id: 626056-001 S MSD Sample Id: 626056-001 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) | <8.00 | 1000 | 1080 | 108 | 1080 | 108 | 70-135 | 0 | 20 | mg/kg | 05.31.19 22:40 | |
| Diesel Range Organics (DRO) | 9.91 | 1000 | 1010 | 100 | 1010 | 100 | 70-135 | 0 | 20 | mg/kg | 05.31.19 22:40 | |

| Surrogate | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1-Chlorooctane | 122 | | 121 | | 70-135 | % | 05.31.19 22:40 |
| o-Terphenyl | 112 | | 116 | | 70-135 | % | 05.31.19 22:40 |

**Analytical Method:** **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3090888 Matrix: Solid Date Prep: 05.31.19
MB Sample Id: 7679056-1-BLK LCS Sample Id: 7679056-1-BKS LCSD Sample Id: 7679056-1-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 | 0.0998 | 0.0738 | 74 | 0.0918 | 91 | 70-130 | 22 | 35 | mg/kg | 06.01.19 13:39 | |
| Toluene | <0.00200 | 0.0998 | 0.0765 | 77 | 0.0931 | 92 | 70-130 | 20 | 35 | mg/kg | 06.01.19 13:39 | |
| Ethylbenzene | <0.00200 | 0.0998 | 0.0842 | 84 | 0.102 | 101 | 70-130 | 19 | 35 | mg/kg | 06.01.19 13:39 | |
| m,p-Xylenes | <0.00399 | 0.200 | 0.178 | 89 | 0.216 | 107 | 70-130 | 19 | 35 | mg/kg | 06.01.19 13:39 | |
| o-Xylene | <0.00200 | 0.0998 | 0.0886 | 89 | 0.105 | 104 | 70-130 | 17 | 35 | mg/kg | 06.01.19 13:39 | |

| Surrogate | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 104 | | 91 | | 90 | | 70-130 | % | 06.01.19 13:39 |
| 4-Bromofluorobenzene | 103 | | 103 | | 99 | | 70-130 | % | 06.01.19 13:39 |

**Analytical Method:** **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3090888 Matrix: Soil Date Prep: 05.31.19
Parent Sample Id: 625612-012 MS Sample Id: 625612-012 S MSD Sample Id: 625612-012 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | 0.0992 | 0.0888 | 90 | 0.0819 | 81 | 70-130 | 8 | 35 | mg/kg | 06.01.19 14:17 | |
| Toluene | <0.00198 | 0.0992 | 0.0532 | 54 | 0.0492 | 49 | 70-130 | 8 | 35 | mg/kg | 06.01.19 14:17 | X |
| Ethylbenzene | <0.00198 | 0.0992 | 0.0699 | 70 | 0.0659 | 65 | 70-130 | 6 | 35 | mg/kg | 06.01.19 14:17 | X |
| m,p-Xylenes | <0.00397 | 0.198 | 0.128 | 65 | 0.123 | 61 | 70-130 | 4 | 35 | mg/kg | 06.01.19 14:17 | X |
| o-Xylene | <0.00198 | 0.0992 | 0.0881 | 89 | 0.0867 | 86 | 70-130 | 2 | 35 | mg/kg | 06.01.19 14:17 | |

| Surrogate | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date |
|---|---|---|---|---|---|---|---|
| 1,4-Difluorobenzene | 94 | | 94 | | 70-130 | % | 06.01.19 14:17 |
| 4-Bromofluorobenzene | 104 | | 104 | | 70-130 | % | 06.01.19 14:17 |

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: 626642

www.xenco.com Page 1 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Jay Loudermilk | Bill to: (if different) | James Kennedy |
| Company Name: | NTG Environmental | Company Name: | EOG Resources |
| Address: | | Address: | 5509 Champions Dr |
| City, State ZIP: | | City, State ZIP: | Midland, TX 79706 |
| Phone: | Email: | jloudermilk@ntglobal.com | |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Vaca Lineshrike | Turn Around | |
| Project Number: | | Routine ☐ | |
| P.O. Number: | | Rush: 48HR | |
| Sampler's Name: | | Due Date: | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temperature (°C): | 2.3/0.1 | Temp Blank: Yes (No) | Wet Ice: (Yes) No |
| Received Intact: | (Yes) No | Thermometer ID: | RE |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | |

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Chloride | TPH 8015 | BTEX |
|---|---|---|---|---|---|---|---|---|
| AOC1 CS1 4' | S | 5/28/19 | 12:15 | 4' | 1 | X | X | X |
| AOC1 SW1 2' | | | 12:20 | 2' | 1 | X | | X |
| AOC1 SW2 2' | | | 12:25 | 2' | 1 | X | | |
| AOC1 SW3 2' | | | 12:30 | 2' | 1 | X | | |
| AOC1 SW4 2' | | | 12:35 | 2' | 1 | X | | |
| AOC2 CS1 5' | | | 10:45 | 5' | 1 | X | | |
| AOC2 SW1 2.5' | | | 10:50 | 2.5' | 1 | X | | |
| AOC2 SW2 2.5' | | | 10:55 | 2.5' | 1 | X | | |
| AOC2 SW3 2.5' | | | 11:00 | 2.5' | 1 | X | | |
| AOC2 SW4 2.5' | | | 11:05 | 2.5' | 1 | X | | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

**Sample Comments**

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 |
|---|---|---|---|---|---|
| 1 | | 5/31/19 0932 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

# 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:** 620062

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| | | | |
|---|---|---|---|
| Project Manager: | Jay Lockerman | Bill to: (if different) | James Kennedy |
| Company Name: | | Company Name: | |
| Address: | | Address: | |
| City, State ZIP: | | City, State ZIP: | |
| Phone: | Email: | | |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | | Turn Around | |
| Project Number: | | Routine ☐ | |
| P.O. Number: | | Rush 48HR | |
| Sampler's Name: | | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No | |
| Temperature (°C): | 4.3/6.1 | Thermometer ID: | 126 | |
| Received Intact: | (Yes) No | | | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | | |

**ANALYSIS REQUEST**

**Work Order Notes**

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Chloride | Sample Comments |
|---|---|---|---|---|---|---|---|
| AOC3 CS1 4' | | 5/28/19 | 11:30 | 4' | 1 | + | |
| AOC3 SW1 2' | | | 11:35 | 2' | 1 | + | |
| AOC3 SW2 2' | | | 11:40 | 2' | 1 | + | |
| AOC3 SW3 2' | | | 11:45 | 2' | 1 | + | |
| AOC3 SW4 2' | | | 11:50 | 2' | 1 | + | |

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 |
|---|---|---|---|---|---|
| 1 | | 5/31/19 0832 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Final 1.000

# Certificate of Analysis Summary 604637

## EOG Resources, Midland, TX

## Project Name: Vaca Line Strike

**Project Id:**

**Contact:** Jamon Hohensee

**Project Location:**

**Date Received in Lab:** Wed Nov-07-18 08:00 am

**Report Date:** 09-NOV-18

**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 604637-001 | | 604637-002 | | 604637-003 | | 604637-004 | | 604637-005 | | 604637-006 | |
| | ***Field Id:*** | TP1 2' | | TP1 5' | | TP2 0' | | TP2 2' | | TP3 2' | | TP3 4' | |
| | ***Depth:*** | 2- | | 5- | | 0- | | 5- | | 2- | | 4- | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | Nov-06-18 10:10 | | Nov-06-18 10:25 | | Nov-06-18 13:15 | | Nov-06-18 13:40 | | Nov-06-18 11:00 | | Nov-06-18 11:10 | |
| **Chloride by EPA 300** | ***Extracted:*** | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | |
| | ***Analyzed:*** | Nov-07-18 12:12 | | Nov-07-18 11:57 | | Nov-07-18 17:58 | | Nov-07-18 12:23 | | Nov-07-18 12:28 | | Nov-07-18 12:44 | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 3100 | 25.1 | 48.4 | 4.96 | <4.98 | 4.98 | 13.3 | 4.98 | 287 | 5.00 | 706 | 4.98 |





Holly Taylor
Project Manager

# Certificate of Analysis Summary 604637

## EOG Resources, Midland, TX

## Project Name: Vaca Line Strike

**Project Id:**
**Contact:** Jamon Hohensee
**Project Location:**

**Date Received in Lab:** Wed Nov-07-18 08:00 am
**Report Date:** 09-NOV-18
**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 604637-007 | | 604637-008 | | 604637-009 | | 604637-010 | | 604637-011 | | 604637-012 | |
| | ***Field Id:*** | TP4 3' | | TP4 5' | | TP5 0' | | TP5 5' | | TP6 0' | | TP6 5' | |
| | ***Depth:*** | 3- | | 5- | | 0- | | 5- | | 0- | | 5- | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | Nov-06-18 13:30 | | Nov-06-18 11:40 | | Nov-06-18 11:45 | | Nov-06-18 12:05 | | Nov-06-18 12:15 | | Nov-06-18 12:40 | |
| **Chloride by EPA 300** | ***Extracted:*** | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | |
| | ***Analyzed:*** | Nov-07-18 12:50 | | Nov-07-18 12:55 | | Nov-07-18 13:00 | | Nov-07-18 13:11 | | Nov-07-18 13:05 | | Nov-07-18 13:27 | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | 715 | 4.95 | 140 | 5.00 | <4.99 | 4.99 | 81.5 | 4.98 | <4.99 | 4.99 | 55.8 | 4.95 |





Holly Taylor
Project Manager

# Certificate of Analysis Summary 604637

## EOG Resources, Midland, TX

## Project Name: Vaca Line Strike

**Project Id:**
**Contact:** Jamon Hohensee
**Project Location:**

**Date Received in Lab:** Wed Nov-07-18 08:00 am
**Report Date:** 09-NOV-18
**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 604637-013 | | 604637-014 | | 604637-015 | | 604637-016 | | 604637-017 | | 604637-018 | |
| | ***Field Id:*** | TP7 0' | | TP7 5' | | TP8 0' | | TP8 5' | | BKGD 1' | | BKGD 3' | |
| | ***Depth:*** | 0- | | 5- | | 0- | | 5- | | 1- | | 3- | |
| | ***Matrix:*** | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | | SOIL | |
| | ***Sampled:*** | Nov-06-18 12:45 | | Nov-06-18 13:10 | | Nov-06-18 10:30 | | Nov-06-18 10:45 | | Nov-06-18 13:40 | | Nov-06-18 14:00 | |
| **Chloride by EPA 300** | ***Extracted:*** | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | | Nov-07-18 09:00 | |
| | ***Analyzed:*** | Nov-07-18 13:32 | | Nov-07-18 18:03 | | Nov-07-18 13:53 | | Nov-07-18 13:58 | | Nov-07-18 14:04 | | Nov-07-18 14:09 | |
| | ***Units/RL:*** | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL | mg/kg | RL |
| Chloride | | <4.99 | 4.99 | 58.8 | 5.00 | <4.99 | 4.99 | 41.6 | 4.99 | <4.99 | 4.99 | 78.6 | 4.97 |





Holly Taylor
Project Manager

# Certificate of Analysis Summary 604637

## EOG Resources, Midland, TX

## Project Name: Vaca Line Strike

**Project Id:**

**Contact:** Jamon Hohensee

**Project Location:**

**Date Received in Lab:** Wed Nov-07-18 08:00 am

**Report Date:** 09-NOV-18

**Project Manager:** Holly Taylor

| *Analysis Requested* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | ***Lab Id:*** | 604637-019 | | | | | |
| | ***Field Id:*** | BKGD 5' | | | | | |
| | ***Depth:*** | 5- | | | | | |
| | ***Matrix:*** | SOIL | | | | | |
| | ***Sampled:*** | Nov-06-18 14:10 | | | | | |
| **Chloride by EPA 300** | ***Extracted:*** | Nov-07-18 09:00 | | | | | |
| | ***Analyzed:*** | Nov-07-18 14:14 | | | | | |
| | ***Units/RL:*** | mg/kg | RL | | | | |
| Chloride | | <5.00 | 5.00 | | | | |





Holly Taylor
Project Manager

# Analytical Report 604637

## for

## EOG Resources

**Project Manager: Jamon Hohensee**

**Vaca Line Strike**

**09-NOV-18**

Collected By: Client

**1211 W. Florida Ave, Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)

09-NOV-18

Project Manager: **Jamon Hohensee**
**EOG Resources**
PO Box 2267
Midland, TX 79707

Reference: XENCO Report No(s): **604637**
**Vaca Line Strike**
Project Address:

**Jamon Hohensee** :

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) 604637. 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. 604637 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,

Holly Taylor

**Holly Taylor**
Project Manager

# Sample Cross Reference 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|---|---|---|---|---|
| TP1 2' | S | 11-06-18 10:10 | 2 | 604637-001 |
| TP1 5' | S | 11-06-18 10:25 | 5 | 604637-002 |
| TP2 0' | S | 11-06-18 13:15 | 0 | 604637-003 |
| TP2 2' | S | 11-06-18 13:40 | 5 | 604637-004 |
| TP3 2' | S | 11-06-18 11:00 | 2 | 604637-005 |
| TP3 4' | S | 11-06-18 11:10 | 4 | 604637-006 |
| TP4 3' | S | 11-06-18 13:30 | 3 | 604637-007 |
| TP4 5' | S | 11-06-18 11:40 | 5 | 604637-008 |
| TP5 0' | S | 11-06-18 11:45 | 0 | 604637-009 |
| TP5 5' | S | 11-06-18 12:05 | 5 | 604637-010 |
| TP6 0' | S | 11-06-18 12:15 | 0 | 604637-011 |
| TP6 5' | S | 11-06-18 12:40 | 5 | 604637-012 |
| TP7 0' | S | 11-06-18 12:45 | 0 | 604637-013 |
| TP7 5' | S | 11-06-18 13:10 | 5 | 604637-014 |
| TP8 0' | S | 11-06-18 10:30 | 0 | 604637-015 |
| TP8 5' | S | 11-06-18 10:45 | 5 | 604637-016 |
| BKGD 1' | S | 11-06-18 13:40 | 1 | 604637-017 |
| BKGD 3' | S | 11-06-18 14:00 | 3 | 604637-018 |
| BKGD 5' | S | 11-06-18 14:10 | 5 | 604637-019 |

**Sample receipt non conformances and comments:**

None

**Sample receipt non conformances and comments per sample:**

None

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP1 2'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-001 | Date Collected: | 11.06.18 10.10 | Sample Depth: | 2 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **3100** | 25.1 | mg/kg | 11.07.18 12.12 | | 5 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP1 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-002 | Date Collected: | 11.06.18 10.25 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **48.4** | 4.96 | mg/kg | 11.07.18 11.57 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP2 0'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-003 | Date Collected: | 11.06.18 13.15 | Sample Depth: | 0 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.98 | 4.98 | mg/kg | 11.07.18 17.58 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP2 2'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-004 | Date Collected: | 11.06.18 13.40 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **13.3** | 4.98 | mg/kg | 11.07.18 12.23 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP3 2'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-005 | Date Collected: | 11.06.18 11.00 | Sample Depth: | 2 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **287** | 5.00 | mg/kg | 11.07.18 12.28 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP3 4'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-006 | Date Collected: | 11.06.18 11.10 | Sample Depth: | 4 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **706** | 4.98 | mg/kg | 11.07.18 12.44 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP4 3'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-007 | Date Collected: | 11.06.18 13.30 | Sample Depth: | 3 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **715** | 4.95 | mg/kg | 11.07.18 12.50 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP4 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-008 | Date Collected: | 11.06.18 11.40 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **140** | 5.00 | mg/kg | 11.07.18 12.55 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP5 0'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-009 | Date Collected: | 11.06.18 11.45 | Sample Depth: | 0 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.99 | 4.99 | mg/kg | 11.07.18 13.00 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP5 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-010 | Date Collected: | 11.06.18 12.05 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **81.5** | 4.98 | mg/kg | 11.07.18 13.11 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP6 0'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-011 | Date Collected: | 11.06.18 12.15 | Sample Depth: | 0 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.99 | 4.99 | mg/kg | 11.07.18 13.05 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP6 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-012 | Date Collected: | 11.06.18 12.40 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **55.8** | 4.95 | mg/kg | 11.07.18 13.27 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP7 0'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-013 | Date Collected: | 11.06.18 12.45 | Sample Depth: | 0 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.99 | 4.99 | mg/kg | 11.07.18 13.32 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP7 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-014 | Date Collected: | 11.06.18 13.10 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **58.8** | 5.00 | mg/kg | 11.07.18 18.03 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP8 0'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-015 | Date Collected: | 11.06.18 10.30 | Sample Depth: | 0 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.99 | 4.99 | mg/kg | 11.07.18 13.53 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **TP8 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-016 | Date Collected: | 11.06.18 10.45 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **41.6** | 4.99 | mg/kg | 11.07.18 13.58 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **BKGD 1'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-017 | Date Collected: | 11.06.18 13.40 | Sample Depth: | 1 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <4.99 | 4.99 | mg/kg | 11.07.18 14.04 | U | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **BKGD 3'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-018 | Date Collected: | 11.06.18 14.00 | Sample Depth: | 3 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| **Chloride** | 16887-00-6 | **78.6** | 4.97 | mg/kg | 11.07.18 14.09 | | 1 |

# Certificate of Analytical Results 604637

## EOG Resources, Midland, TX

Vaca Line Strike

| | | | | | |
|---|---|---|---|---|---|
| Sample Id: | **BKGD 5'** | Matrix: | Soil | Date Received: | 11.07.18 08.00 |
| Lab Sample Id: | 604637-019 | Date Collected: | 11.06.18 14.10 | Sample Depth: | 5 |
| Analytical Method: | Chloride by EPA 300 | | | Prep Method: | E300P |
| Tech: | CHE | | | % Moisture: | |
| Analyst: | CHE | Date Prep: | 11.07.18 09.00 | Basis: | Wet Weight |
| Seq Number: | 3069001 | | | | |

| Parameter | Cas Number | Result | RL | Units | Analysis Date | Flag | Dil |
|---|---|---|---|---|---|---|---|
| Chloride | 16887-00-6 | <5.00 | 5.00 | mg/kg | 11.07.18 14.14 | U | 1 |

# 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 604637

## EOG Resources

Vaca Line Strike

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3069001 Matrix: Solid Date Prep: 11.07.18

MB Sample Id: 7665650-1-BLK LCS Sample Id: 7665650-1-BKS LCSD Sample Id: 7665650-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | 250 | 246 | 98 | 246 | 98 | 90-110 | 0 | 20 | mg/kg | 11.07.18 09:37 | |

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3069001 Matrix: Soil Date Prep: 11.07.18

Parent Sample Id: 604637-002 MS Sample Id: 604637-002 S MSD Sample Id: 604637-002 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 48.4 | 248 | 286 | 96 | 288 | 97 | 90-110 | 1 | 20 | mg/kg | 11.07.18 12:02 | |

**Analytical Method:** **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3069001 Matrix: Soil Date Prep: 11.07.18

Parent Sample Id: 604637-010 MS Sample Id: 604637-010 S MSD Sample Id: 604637-010 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 81.5 | 249 | 324 | 97 | 322 | 97 | 90-110 | 1 | 20 | mg/kg | 11.07.18 13:16 | |

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

# 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: 604697

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| | | | |
|---|---|---|---|
| Project Manager: | Jamon Hohensee | Bill to: (if different) | |
| Company Name: | EOG Resources | Company Name: | |
| Address: | 5509 Champions Drive | Address: | |
| City, State ZIP: | Midland, TX 79706 | City, State ZIP: | |
| Phone: | (432)556-8074 | Email: | jamon_hohensee@eogresources.com jloudermilk@ntglobal.com |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | Vaca Line Strike | Turn Around | |
| Project Number: | | Routine ☐ | |
| P.O. Number: | | Rush: 48 hr | |
| Sampler's Name: | JayLoudermilk | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes (No) | |
| Temperature (°C): | 3.5 | Thermometer ID | R8 | |
| Received Intact: | (Yes) No | | | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | 0.0 | |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | | |

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Chlorides |
|---|---|---|---|---|---|---|
| TP1 2' | S | 11/6/18 | 10:10 | 2 | 1 | X |
| TP1 5' | S | | 10:25 | 5 | 1 | X |
| TP2 0' | S | | 13:15 | 0 | 1 | X |
| TP2 5' | | | 13:40 | 5 | 1 | X |
| TP3 2' | | | 11:00 | 2 | 1 | X |
| TP3 4' | | | 11:10 | 4 | 1 | X |
| TP4 3' | | | 11:30 | 3 | 1 | X |
| TP4 5' | | | 11:40 | 5 | 1 | X |
| TP5 0' | | | 11:45 | 0 | 1 | X |
| TP5 5' | ↓ | ↓ | 12:05 | 5 | 1 | X |

**ANALYSIS REQUEST**

**Work Order Notes**

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

**Sample Comments**

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 |
|---|---|---|---|---|---|
| 1 | 11/7/18 0800 | 11/6/18 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev. 2018.1

Final 1.000

# 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:** 604637

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| | | | |
|---|---|---|---|
| Project Manager: | | Bill to: (if different) | |
| Company Name: | | Company Name: | |
| Address: | | Address: | |
| City, State ZIP: | | City, State ZIP: | |
| Phone: | Email: | | |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | | Turn Around | |
| Project Number: | | Routine ☐ | |
| P.O. Number: | | Rush: 48HR | |
| Sampler's Name: | | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes (No) | |
| Temperature (°C): | 3.5 | Thermometer ID | 108 | |
| Received Intact: | (Yes) No | | | |
| Cooler Custody Seals: | Yes (No) N/A | Correction Factor: | 0.0 | |
| Sample Custody Seals: | Yes (No) N/A | Total Containers: | | |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | Chlorides |
|---|---|---|---|---|---|---|
| TP6 0' | S | 11/6/18 | 12:15 | 0 | 1 | X |
| TP6 5' | S | | 12:40 | 5 | | |
| TP7 0' | S | | 12:45 | 0 | | |
| TP7 5' | S | | 13:10 | 5 | | |
| TP8 0' | S | | 10:30 | 0 | | |
| TP8 5' | S | | 10:45 | 5 | | |
| BKGD 1' | S | | 13:40 | 1 | | |
| BKGD 3' | S | | 14:00 | 3 | | |
| BKGD 5' | S | | 14:10 | 5 | 1 | X |

**Work Order Notes**

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

**Sample Comments**

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 |
|---|---|---|---|---|---|
| 1 | 11/7/18 0900 | 11/6/18 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** EOG Resources

**Date/ Time Received:** 11/07/2018 08:00:00 AM

**Work Order #:** 604637

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

**Temperature Measuring device used : R8**

| Sample Receipt Checklist | Comments |
|---|---|
| #1 *Temperature of cooler(s)? | 3.5 |
| #2 *Shipping container in good condition? | **Yes** |
| #3 *Samples received on ice? | **N/A** |
| #4 *Custody Seals intact on shipping container/ cooler? | **N/A** |
| #5 Custody Seals intact on sample bottles? | **N/A** |
| #6*Custody Seals Signed and dated? | **N/A** |
| #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)? | **N/A** |
| #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:** Brianna Teel Date: 11/07/2018
Brianna Teel

**Checklist reviewed by:** Holly Taylor Date: 11/07/2018
Holly Taylor