



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pVF1706734658

**3RP - 1044**

**XTO ENERGY, INC**

4/28/2017



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

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

|   |                                   |                                 |
|---|-----------------------------------|---------------------------------|
| Name of Company: XTO Energy, Inc.               | Contact: Logan Hixon              |                                 |
| Address: 382 Road 3100, Aztec, New Mexico 87410 | Telephone No.: (505) 333-3683     |                                 |
| Facility Name: NV Navajo 35-1 Wtr Manifold      | Facility Type: Gas/Water Manifold |                                 |
| Surface Owner: Navajo Nation                    | Mineral Owner: Tribal             | API No. Non Production Facility |

**LOCATION OF RELEASE**

|                  |               |                  |              |               |                  |               |                |                    |
|------------------|---------------|------------------|--------------|---------------|------------------|---------------|----------------|--------------------|
| Unit Letter<br>A | Section<br>35 | Township<br>29 N | Range<br>14W | Feet from the | North/South Line | Feet from the | East/West Line | County<br>San Juan |
|------------------|---------------|------------------|--------------|---------------|------------------|---------------|----------------|--------------------|

Latitude: N36.6852 Longitude: W-108.2708

**NATURE OF RELEASE**


|  |  |   |
|--|--|---|
| Type of Release: Produced Water  | Volume of Release:<br>Approximately 10 bbl.                      | Volume Recovered: 0 bbl. Recovered                    |
| Source of Release: Water Manifold (Gas Eliminator)   | Date and Hour of Occurrence:<br>February 1, 2017 at Unknown Time | Date and Hour of Discovery: February 1, 2017 at 1145. |
| Was Immediate Notice Given?<br><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom?<br>N/A  |   |
| By Whom?   | Date and Hour:   |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.                        |   |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* On February 1, 2017, a water leak was discovered in the produced water transport line near the NV Navajo 35-1 well site. An estimated 10 bbl. of produced water leaked from the pipeline. The waterline was evacuated, and the leak occurred at the above grade gas eliminator. The produced water traveled to the north east approximately 500 feet where it stopped. The site was ranked a 20 pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills, and Releases. The distance to a waterway is estimated to be less than 200 feet from the end of the release. This set the regulatory limits to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.\* On February 1, 2017, a composite sample was collected at the source of the release, a composite sample was collected approximately 200' down the flow path, and another composite sample was collected at the end of the release. The samples were analyzed for DRO/GRO via USEPA Method 8015, BTEX via USEPA Method 8021, and for chlorides. All samples returned results below all regulatory standards determined for this location. The sample results are attached for your reference. On March 22, 2017, the top portion of the release area was scraped up, and then approximately (150) one hundred fifty pounds of gypsum at an approximate rate of (1) one pound per square foot was applied to the spill area as approved on March 15, 2017. On June 1-2, 2017 the process of removing stressed vegetation was completed at the request of the NNEPA & NMOCD. (photos attached) On June 2, 2017 approximately (150) one hundred fifty pounds of gypsum were applied to the lower end of the release area as requested by the NNEPA and NMOCD. No further action required

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

|   |   |                                   |
|---|---|-----------------------------------|
| Signature:                                | <b>OIL CONSERVATION DIVISION</b>  |                                   |
| Printed Name: Logan Hixon                 | Approved by Environmental Specialist:  |                                   |
| Title: EHS Coordinator                    | Approval Date: 6/12/2017  | Expiration Date:                  |
| E-mail Address: Logan_Hixon@xtoenergy.com | Conditions of Approval:   | Attached <input type="checkbox"/> |
| Date: June 8, 2017                        | Phone: 505-333-3683   |                                   |

\* Attach Additional Sheets If Necessary

OIL CONS. DIV DIST. 3

NVF1708631561

JUN 12 2017



February 09, 2017

## XTO Energy - San Juan Division

Sample Delivery Group: L887468  
Samples Received: 02/02/2017  
Project Number:  
Description: NV Navajo 35-1

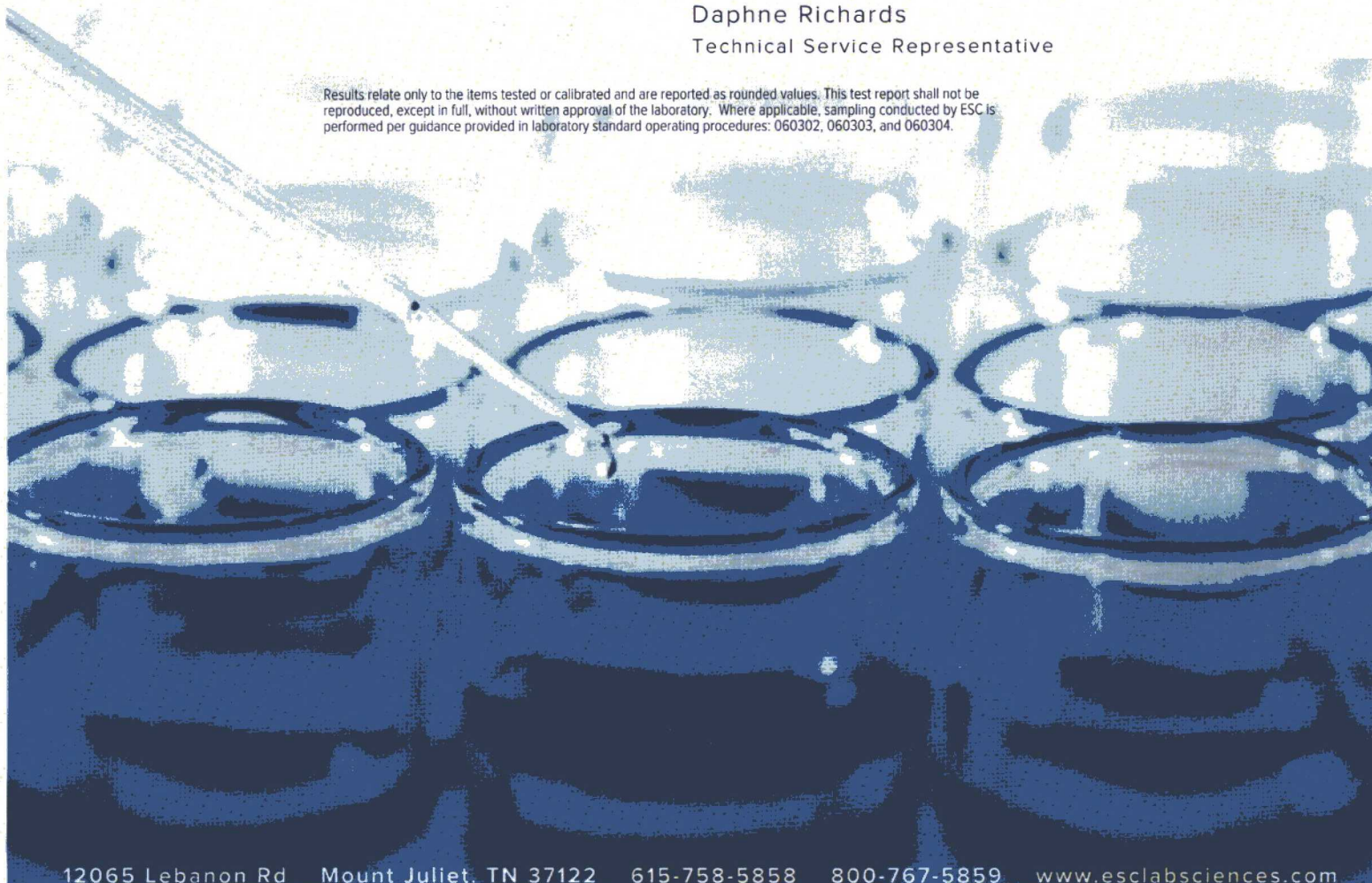
Report To: James McDaniel  
382 County Road 3100  
Aztec, NM 87410

Entire Report Reviewed By:

*Daphne R Richards*

Daphne Richards  
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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ONE LAB. NATIONWIDE



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<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## POINT OF RELEASE L887468-01 Solid

Collected by  
Logan HixonCollected date/time  
02/01/17 13:25Received date/time  
02/02/17 09:00

| Method  | Batch    | Dilution | Preparation<br>date/time | Analysis<br>date/time | Analyst |
|---|----------|----------|--------------------------|-----------------------|---------|
| Semi-Volatile Organic Compounds (GC) by Method 8015 | WG949458 | 1        | 02/06/17 23:01           | 02/07/17 13:14        | KLM     |
| Total Solids by Method 2540 G-2011                  | WG949506 | 1        | 02/04/17 13:20           | 02/04/17 13:32        | KDW     |
| Volatile Organic Compounds (GC) by Method 8015/8021 | WG949639 | 1        | 02/03/17 09:39           | 02/06/17 18:30        | JHH     |
| Wet Chemistry by Method 9056A                       | WG949592 | 20       | 02/06/17 12:30           | 02/07/17 05:59        | KCF     |

Cp

Tc

Cn

Sr

Qc

Gl

Al

Sc

## BEFORE SANDSTONE L887468-02 Solid

Collected by  
Logan HixonCollected date/time  
02/01/17 13:30Received date/time  
02/02/17 09:00

| Method  | Batch    | Dilution | Preparation<br>date/time | Analysis<br>date/time | Analyst |
|---|----------|----------|--------------------------|-----------------------|---------|
| Semi-Volatile Organic Compounds (GC) by Method 8015 | WG949458 | 1        | 02/06/17 23:01           | 02/07/17 13:25        | KLM     |
| Total Solids by Method 2540 G-2011                  | WG949506 | 1        | 02/04/17 13:20           | 02/04/17 13:32        | KDW     |
| Volatile Organic Compounds (GC) by Method 8015/8021 | WG949639 | 1        | 02/03/17 09:39           | 02/06/17 18:54        | JHH     |
| Wet Chemistry by Method 9056A                       | WG949592 | 10       | 02/06/17 12:30           | 02/07/17 06:16        | KCF     |

## END OF RELEASE L887468-03 Solid

Collected by  
Logan HixonCollected date/time  
02/01/17 13:35Received date/time  
02/02/17 09:00

| Method  | Batch    | Dilution | Preparation<br>date/time | Analysis<br>date/time | Analyst |
|---|----------|----------|--------------------------|-----------------------|---------|
| Semi-Volatile Organic Compounds (GC) by Method 8015 | WG949458 | 1        | 02/06/17 23:01           | 02/07/17 13:37        | KLM     |
| Total Solids by Method 2540 G-2011                  | WG949506 | 1        | 02/04/17 13:20           | 02/04/17 13:32        | KDW     |
| Volatile Organic Compounds (GC) by Method 8015/8021 | WG949639 | 1        | 02/03/17 09:39           | 02/08/17 14:06        | KMC     |
| Wet Chemistry by Method 9056A                       | WG949592 | 5        | 02/06/17 12:30           | 02/07/17 06:32        | KCF     |



# CASE NARRATIVE

ONE LAB. NATIONWIDE.



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

*Daphne R Richards*

Daphne Richards  
Technical Service Representative

Cp

Tc

Ss

Sr

Qc

GI

AI

Sc



## POINT OF RELEASE

Collected date/time: 02/01/17 13:25

## SAMPLE RESULTS - 01

L887468

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

| Analyte      | Result | Qualifier | Dilution | Analysis         | Batch                    |
|--------------|--------|-----------|----------|------------------|--------------------------|
|              | %      |           |          | date / time      |                          |
| Total Solids | 87.5   |           | 1        | 02/04/2017 13:32 | <a href="#">WG949506</a> |

Cp

Tc

## Wet Chemistry by Method 9056A

| Analyte  | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------|--------------|-----------|-----------|----------|------------------|--------------------------|
|          | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Chloride | 6910         |           | 229       | 20       | 02/07/2017 05:59 | <a href="#">WG949592</a> |

Ss

Cn

## Volatile Organic Compounds (GC) by Method 8015/8021

| Analyte                         | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|---------------------------------|--------------|-----------|-----------|----------|------------------|--------------------------|
|                                 | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Benzene                         | 0.000777     |           | 0.000571  | 1        | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| Toluene                         | ND           |           | 0.00571   | 1        | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| Ethylbenzene                    | ND           |           | 0.000571  | 1        | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| Total Xylene                    | 0.00173      |           | 0.00171   | 1        | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| TPH (GC/FID) Low Fraction       | 0.138        |           | 0.114     | 1        | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| (S) o,a,a-Trifluorotoluene(FID) | 103          |           | 77.0-120  |          | 02/06/2017 18:30 | <a href="#">WG949639</a> |
| (S) o,a,a-Trifluorotoluene(PID) | 107          |           | 75.0-128  |          | 02/06/2017 18:30 | <a href="#">WG949639</a> |

Qc

GI

AI

Sc

## Semi-Volatile Organic Compounds (GC) by Method 8015

| Analyte                    | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------------------------|--------------|-----------|-----------|----------|------------------|--------------------------|
|                            | mg/kg        |           | mg/kg     |          | date / time      |                          |
| TPH (GC/FID) High Fraction | 31.3         |           | 4.57      | 1        | 02/07/2017 13:14 | <a href="#">WG949458</a> |
| (S) o-Terphenyl            | 20.7         |           | 18.0-148  |          | 02/07/2017 13:14 | <a href="#">WG949458</a> |



## BEFORE SANDSTONE

Collected date/time: 02/01/17 13:30

## SAMPLE RESULTS - 02

L887468

ONE LAB. NATIONWIDE



## Total Solids by Method 2540 G-2011

| Analyte      | Result | Qualifier | Dilution | Analysis         | Batch                    |
|--------------|--------|-----------|----------|------------------|--------------------------|
|              | %      |           |          | date / time      |                          |
| Total Solids | 81.8   |           | 1        | 02/04/2017 13:32 | <a href="#">WG949506</a> |

Cp

Tc

Ss

Cn

## Wet Chemistry by Method 9056A

| Analyte  | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------|--------------|-----------|-----------|----------|------------------|--------------------------|
|          | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Chloride | 3580         |           | 122       | 10       | 02/07/2017 06:16 | <a href="#">WG949592</a> |

## Volatile Organic Compounds (GC) by Method 8015/8021

| Analyte                                 | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|---|--------------|-----------|-----------|----------|------------------|--------------------------|
|   | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Benzene                                 | 0.00152      |           | 0.000612  | 1        | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| Toluene                                 | ND           |           | 0.00612   | 1        | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| Ethylbenzene                            | ND           |           | 0.000612  | 1        | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| Total Xylene                            | ND           |           | 0.00183   | 1        | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| TPH (GC/FID) Low Fraction               | 0.303        |           | 0.122     | 1        | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| (S) <i>a,a,a</i> -Trifluorotoluene(FID) | 104          |           | 77.0-120  |          | 02/06/2017 18:54 | <a href="#">WG949639</a> |
| (S) <i>a,a,a</i> -Trifluorotoluene(PID) | 107          |           | 75.0-128  |          | 02/06/2017 18:54 | <a href="#">WG949639</a> |

Qc

GI

AI

Sc

## Semi-Volatile Organic Compounds (GC) by Method 8015

| Analyte                    | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------------------------|--------------|-----------|-----------|----------|------------------|--------------------------|
|                            | mg/kg        |           | mg/kg     |          | date / time      |                          |
| TPH (GC/FID) High Fraction | ND           |           | 4.89      | 1        | 02/07/2017 13:25 | <a href="#">WG949458</a> |
| (S) <i>o</i> -Terphenyl    | 70.1         |           | 18.0-148  |          | 02/07/2017 13:25 | <a href="#">WG949458</a> |



## END OF RELEASE

Collected date/time: 02/01/17 13:35

## SAMPLE RESULTS - 03

L887468

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

| Analyte      | Result | Qualifier | Dilution | Analysis         | Batch                    |
|--------------|--------|-----------|----------|------------------|--------------------------|
|              | %      |           |          | date / time      |                          |
| Total Solids | 83.0   |           | 1        | 02/04/2017 13:32 | <a href="#">WG949506</a> |

## Wet Chemistry by Method 9056A

| Analyte  | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------|--------------|-----------|-----------|----------|------------------|--------------------------|
|          | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Chloride | 994          |           | 60.2      | 5        | 02/07/2017 06:32 | <a href="#">WG949592</a> |

## Volatile Organic Compounds (GC) by Method 8015/8021

| Analyte                         | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|---------------------------------|--------------|-----------|-----------|----------|------------------|--------------------------|
|                                 | mg/kg        |           | mg/kg     |          | date / time      |                          |
| Benzene                         | 0.00117      |           | 0.000602  | 1        | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| Toluene                         | ND           |           | 0.00602   | 1        | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| Ethylbenzene                    | ND           |           | 0.000602  | 1        | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| Total Xylene                    | ND           |           | 0.00181   | 1        | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| TPH (GC/FID) Low Fraction       | ND           |           | 0.120     | 1        | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| (S) a,a,a-Trifluorotoluene(FID) | 105          |           | 77.0-120  |          | 02/08/2017 14:06 | <a href="#">WG949639</a> |
| (S) a,a,a-Trifluorotoluene(PID) | 108          |           | 75.0-128  |          | 02/08/2017 14:06 | <a href="#">WG949639</a> |

## Semi-Volatile Organic Compounds (GC) by Method 8015

| Analyte                    | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis         | Batch                    |
|----------------------------|--------------|-----------|-----------|----------|------------------|--------------------------|
|                            | mg/kg        |           | mg/kg     |          | date / time      |                          |
| TPH (GC/FID) High Fraction | ND           |           | 4.82      | 1        | 02/07/2017 13:37 | <a href="#">WG949458</a> |
| (S) o-Terphenyl            | 45.2         |           | 18.0-148  |          | 02/07/2017 13:37 | <a href="#">WG949458</a> |

Cp

Tc

Ss

Cn

Qc

Gl

Al

Sc



WG949506

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

L887468-01,02,03

## Method Blank (MB)

(MB) R3194915-1 02/04/17 13:32

| Analyte      | MB Result<br>% | <u>MB Qualifier</u> | MB MDL<br>% | MB RDL<br>% |
|--------------|----------------|---------------------|-------------|-------------|
| Total Solids | 0.00100        |                     |             |             |

## L887502-04 Original Sample (OS) • Duplicate (DUP)

(OS) L887502-04 02/04/17 13:32 • (DUP) R3194915-3 02/04/17 13:32

| Analyte      | Original Result<br>% | DUP Result<br>% | Dilution | DUP RPD<br>% | <u>DUP Qualifier</u> | DUP RPD Limits |
|--------------|----------------------|-----------------|----------|--------------|----------------------|----------------|
| Total Solids | 68.4                 | 68.2            | 1        | 0.314        |                      | 5              |

## Laboratory Control Sample (LCS)

(LCS) R3194915-2 02/04/17 13:32

| Analyte      | Spike Amount<br>% | LCS Result<br>% | LCS Rec.<br>% | Rec. Limits<br>% | <u>LCS Qualifier</u> |
|--------------|-------------------|-----------------|---------------|------------------|----------------------|
| Total Solids | 50.0              | 50.0            | 100           | 85.0-115         |                      |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 GI

8 AI

9 Sc



WG949592

Wet Chemistry by Method 9056A

## QUALITY CONTROL SUMMARY

L887468-01,02,03

ONE LAB. NATIONWIDE.



## Method Blank (MB)

(MB) R3195179-1 02/06/17 21:56

|          | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------|-----------|--------------|--------|--------|
| Analyte  | mg/kg     |              | mg/kg  | mg/kg  |
| Chloride | 2.18      | J            | 0.795  | 10.0   |

## L887220-17 Original Sample (OS) • Duplicate (DUP)

(OS) L887220-17 02/07/17 00:09 • (DUP) R3195179-4 02/07/17 00:26

|          | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------------|------------------|----------|---------|---------------|----------------|
| Analyte  | mg/kg                 | mg/kg            |          | %       |               | %              |
| Chloride | ND                    | 5.21             | 1        | 0       |               | 15             |

## L887220-19 Original Sample (OS) • Duplicate (DUP)

(OS) L887220-19 02/07/17 01:32 • (DUP) R3195179-5 02/07/17 01:49

|          | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------------|------------------|----------|---------|---------------|----------------|
| Analyte  | mg/kg                 | mg/kg            |          | %       |               | %              |
| Chloride | ND                    | 6.68             | 1        | 0       |               | 15             |

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3195179-2 02/06/17 22:12 • (LCSD) R3195179-3 02/06/17 22:29

|          | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
|----------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-----|------------|
| Analyte  | mg/kg        | mg/kg      | mg/kg       | %        | %         | %           |               |                | %   | %          |
| Chloride | 200          | 191        | 194         | 95       | 97        | 80-120      |               |                | 2   | 15         |

## L887220-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L887220-27 02/07/17 04:36 • (MS) R3195179-6 02/07/17 04:52 • (MSD) R3195179-7 02/07/17 05:09

|          | Spike Amount (dry) | Original Result (dry) | MS Result (dry) | MSD Result (dry) | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|----------|--------------------|-----------------------|-----------------|------------------|---------|----------|----------|-------------|--------------|---------------|-----|------------|
| Analyte  | mg/kg              | mg/kg                 | mg/kg           | mg/kg            | %       | %        |          | %           |              |               | %   | %          |
| Chloride | 607                | ND                    | 634             | 637              | 103     | 103      | 1        | 80-120      |              |               | 1   | 15         |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 GI

8 AI

9 Sc



WG949639

Volatile Organic Compounds (GC) by Method 8015/8021

## QUALITY CONTROL SUMMARY

L887468-01,02,03

ONE LAB. NATIONWIDE.



## Method Blank (MB)

(MB) R3195344-5 02/06/17 13:19

| Analyte                             | MB Result | MB Qualifier | MB MDL   | MB RDL   |
|-------------------------------------|-----------|--------------|----------|----------|
|                                     | mg/kg     |              | mg/kg    | mg/kg    |
| Benzene                             | U         |              | 0.000120 | 0.000500 |
| Toluene                             | 0.000380  | J            | 0.000150 | 0.00500  |
| Ethylbenzene                        | U         |              | 0.000110 | 0.000500 |
| Total Xylene                        | U         |              | 0.000460 | 0.00150  |
| TPH (GC/FID) Low Fraction           | U         |              | 0.0217   | 0.100    |
| (S) a,a,a-Trifluorotoluene(FID) 105 |           |              |          | 77.0-120 |
| (S) a,a,a-Trifluorotoluene(PID) 110 |           |              |          | 75.0-128 |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3195344-1 02/06/17 11:19 • (LCSD) R3195344-2 02/06/17 11:43

| Analyte                         | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
|---------------------------------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                                 | mg/kg        | mg/kg      | mg/kg       | %        | %         | %           |               |                | %     | %          |
| Benzene                         | 0.0500       | 0.0506     | 0.0515      | 101      | 103       | 71.0-121    |               |                | 1.79  | 20         |
| Toluene                         | 0.0500       | 0.0500     | 0.0503      | 100      | 101       | 72.0-120    |               |                | 0.550 | 20         |
| Ethylbenzene                    | 0.0500       | 0.0525     | 0.0530      | 105      | 106       | 76.0-121    |               |                | 1.07  | 20         |
| Total Xylene                    | 0.150        | 0.157      | 0.160       | 105      | 107       | 75.0-124    |               |                | 1.83  | 20         |
| (S) a,a,a-Trifluorotoluene(FID) |              |            |             | 105      | 105       | 77.0-120    |               |                |       |            |
| (S) a,a,a-Trifluorotoluene(PID) |              |            |             | 108      | 108       | 75.0-128    |               |                |       |            |

7 GI

8 AI

9 Sc

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3195344-3 02/06/17 12:07 • (LCSD) R3195344-4 02/06/17 12:31

| Analyte                         | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD   | RPD Limits |
|---------------------------------|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|------------|
|                                 | mg/kg        | mg/kg      | mg/kg       | %        | %         | %           |               |                | %     | %          |
| TPH (GC/FID) Low Fraction       | 5.50         | 5.07       | 5.02        | 92.1     | 91.2      | 70.0-136    |               |                | 0.970 | 20         |
| (S) a,a,a-Trifluorotoluene(FID) |              |            |             | 106      | 105       | 77.0-120    |               |                |       |            |
| (S) a,a,a-Trifluorotoluene(PID) |              |            |             | 120      | 120       | 75.0-128    |               |                |       |            |

## L887539-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L887539-01 02/06/17 15:42 • (MS) R3195344-6 02/06/17 16:06 • (MSD) R3195344-7 02/06/17 16:30

| Analyte                         | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD  | RPD Limits |
|---------------------------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
|                                 | mg/kg        | mg/kg           | mg/kg     | mg/kg      | %       | %        |          | %           |              |               | %    | %          |
| Benzene                         | 0.0500       | ND              | 0.428     | 0.445      | 90.0    | 93.7     | 9.5      | 10.0-146    |              |               | 3.99 | 29         |
| Toluene                         | 0.0500       | ND              | 0.419     | 0.433      | 87.7    | 90.8     | 9.5      | 10.0-143    |              |               | 3.48 | 30         |
| Ethylbenzene                    | 0.0500       | ND              | 0.444     | 0.463      | 93.5    | 97.6     | 9.5      | 10.0-147    |              |               | 4.27 | 31         |
| Total Xylene                    | 0.150        | ND              | 1.35      | 1.41       | 95.0    | 99.0     | 9.5      | 10.0-149    |              |               | 4.12 | 30         |
| (S) a,a,a-Trifluorotoluene(FID) |              |                 |           |            | 105     | 105      |          | 77.0-120    |              |               |      |            |



WG949639

Volatile Organic Compounds (GC) by Method 8015/8021

## QUALITY CONTROL SUMMARY

L887468-01,02,03

ONE LAB. NATIONWIDE.



## L887539-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L887539-01 02/06/17 15:42 • (MS) R3195344-6 02/06/17 16:06 • (MSD) R3195344-7 02/06/17 16:30

| Analyte                         | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| (S) a,a,a-Trifluorotoluene(PID) |                       |                          |                    |                     | 108          | 109           |          | 75.0-128         |              |               |          |                 |

## L887539-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L887539-01 02/08/17 14:30 • (MS) R3195726-1 02/08/17 15:43 • (MSD) R3195726-2 02/08/17 16:07

| Analyte                         | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|---------------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| TPH (GC/FID) Low Fraction       | 5.50                  | ND                       | 8.46               | 8.40                | 16.2         | 16.1          | 9.5      | 10.0-147         |              |               | 0.710    | 30              |
| (S) a,a,a-Trifluorotoluene(FID) |                       |                          |                    |                     | 108          | 108           |          | 77.0-120         |              |               |          |                 |
| (S) a,a,a-Trifluorotoluene(PID) |                       |                          |                    |                     | 111          | 111           |          | 75.0-128         |              |               |          |                 |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc



WG949458

Semi-Volatile Organic Compounds (GC) by Method 8015

## QUALITY CONTROL SUMMARY

L887468-01,02,03

ONE LAB. NATIONWIDE.



## Method Blank (MB)

(MB) R3195281-1 02/07/17 08:57

| Analyte                    | MB Result<br>mg/kg | MB Qualifier | MB MDL<br>mg/kg | MB RDL<br>mg/kg |
|----------------------------|--------------------|--------------|-----------------|-----------------|
| TPH (GC/FID) High Fraction | U                  |              | 0.769           | 4.00            |
| (S) o-Terphenyl            | 77.0               |              |                 | 18.0-148        |

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3195281-2 02/07/17 09:08 • (LCSD) R3195281-3 02/07/17 09:19

| Analyte                    | Spike Amount<br>mg/kg | LCS Result<br>mg/kg | LCSD Result<br>mg/kg | LCS Rec.<br>% | LCSD Rec.<br>% | Rec. Limits<br>% | LCS Qualifier | LCSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------------|-----------------------|---------------------|----------------------|---------------|----------------|------------------|---------------|----------------|----------|-----------------|
| TPH (GC/FID) High Fraction | 60.0                  | 45.4                | 44.6                 | 75.6          | 74.3           | 50.0-150         |               |                | 1.68     | 20              |
| (S) o-Terphenyl            |                       |                     |                      | 85.5          | 84.9           | 18.0-148         |               |                |          |                 |

## L887539-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L887539-04 02/07/17 14:34 • (MS) R3195281-4 02/07/17 14:46 • (MSD) R3195281-5 02/07/17 14:58

| Analyte                    | Spike Amount<br>mg/kg | Original Result<br>mg/kg | MS Result<br>mg/kg | MSD Result<br>mg/kg | MS Rec.<br>% | MSD Rec.<br>% | Dilution | Rec. Limits<br>% | MS Qualifier | MSD Qualifier | RPD<br>% | RPD Limits<br>% |
|----------------------------|-----------------------|--------------------------|--------------------|---------------------|--------------|---------------|----------|------------------|--------------|---------------|----------|-----------------|
| TPH (GC/FID) High Fraction | 60.0                  | ND                       | 50.5               | 48.1                | 84.2         | 80.1          | 1        | 50.0-150         |              |               | 4.96     | 20              |
| (S) o-Terphenyl            |                       |                          |                    |                     | 88.0         | 83.7          |          | 18.0-148         |              |               |          |                 |

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc





## Abbreviations and Definitions

|                 |  |
|-----------------|--|
| SDG             | Sample Delivery Group.   |
| MDL             | Method Detection Limit.  |
| RDL             | Reported Detection Limit.  |
| ND              | Not detected at the Reporting Limit (or MDL where applicable).   |
| U               | Not detected at the Reporting Limit (or MDL where applicable).   |
| RPD             | Relative Percent Difference.   |
| (dry)           | Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].   |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.  |
| (S)             | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| Rec.            | Recovery.  |

## Qualifier Description

|   |   |
|---|---|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
|---|---|

Cp

<sup>2</sup>Tc<sup>3</sup>Ss<sup>4</sup>Cn<sup>5</sup>Sr<sup>6</sup>Qc<sup>8</sup>Al<sup>9</sup>Sc



# ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.  
 \* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## State Accreditations

|                       |             |                             |                   |
|-----------------------|-------------|-----------------------------|-------------------|
| Alabama               | 40660       | Nevada                      | TN-03-2002-34     |
| Alaska                | UST-080     | New Hampshire               | 2975              |
| Arizona               | AZ0612      | New Jersey-NELAP            | TN002             |
| Arkansas              | 88-0469     | New Mexico                  | TN00003           |
| California            | 01157CA     | New York                    | 11742             |
| Colorado              | TN00003     | North Carolina              | Env375            |
| Connecticut           | PH-0197     | North Carolina <sup>1</sup> | DW21704           |
| Florida               | E87487      | North Carolina <sup>2</sup> | 41                |
| Georgia               | NELAP       | North Dakota                | R-140             |
| Georgia <sup>1</sup>  | 923         | Ohio-VAP                    | CL0069            |
| Idaho                 | TN00003     | Oklahoma                    | 9915              |
| Illinois              | 200008      | Oregon                      | TN200002          |
| Indiana               | C-TN-01     | Pennsylvania                | 68-02979          |
| Iowa                  | 364         | Rhode Island                | 221               |
| Kansas                | E-10277     | South Carolina              | 84004             |
| Kentucky <sup>1</sup> | 90010       | South Dakota                | n/a               |
| Kentucky <sup>2</sup> | 16          | Tennessee <sup>14</sup>     | 2006              |
| Louisiana             | AI30792     | Texas                       | T 104704245-07-TX |
| Maine                 | TN0002      | Texas <sup>5</sup>          | LAB0152           |
| Maryland              | 324         | Utah                        | 6157585858        |
| Massachusetts         | M-TN003     | Vermont                     | VT2006            |
| Michigan              | 9958        | Virginia                    | 109               |
| Minnesota             | 047-999-395 | Washington                  | C1915             |
| Mississippi           | TN00003     | West Virginia               | 233               |
| Missouri              | 340         | Wisconsin                   | 9980939910        |
| Montana               | CERT0086    | Wyoming                     | A2LA              |
| Nebraska              | NE-OS-15-05 |                             |                   |

## Third Party & Federal Accreditations

|                               |         |      |         |
|-------------------------------|---------|------|---------|
| A2LA - ISO 17025              | 1461.01 | AIHA | 100789  |
| A2LA - ISO 17025 <sup>5</sup> | 1461.02 | DOD  | 1461.01 |
| Canada                        | 1461.01 | USDA | S-67674 |
| EPA-Crypto                    | TN00003 |      |         |

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>14</sup> Accreditation not applicable

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



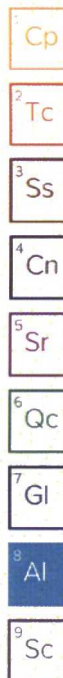
ACCOUNT:  
XTO Energy - San Juan Division

PROJECT:

SDG:  
L887468

DATE/TIME:  
02/09/17 10:06

PAGE:  
14 of 16





\* Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200



## ESC LAB SCIENCES Cooler Receipt Form

| Client: <u>XTO</u>                           | SDG#         | <u>1837468</u> |    |
|--|--------------|----------------|----|
| Cooler Received/Opened On: <u>02/2</u> /2017 | Temperature: |                |    |
| Received By: <u>James Watkins</u>            |              |                |    |
| Signature: <u>[Signature]</u>                |              |                |    |
| Receipt Check List                           | NP           | Yes            | No |
| COC Seal Present / Intact?                   | ✓            |                |    |
| COC Signed / Accurate?                       |              | ✓              |    |
| Bottles arrive intact?                       |              | ✓              |    |
| Correct bottles used?                        |              | ✓              |    |
| Sufficient volume sent?                      |              | ✓              |    |
| If Applicable                                |              |                |    |
| VOA Zero headspace?                          |              |                |    |
| Preservation Correct / Checked?              |              |                |    |



## Hixon, Logan

---

**From:** Hixon, Logan  
**Sent:** Wednesday, March 15, 2017 10:12 AM  
**To:** 'Fields, Vanessa, EMNRD'; Powell, Brandon, EMNRD; Smith, Cory, EMNRD; Bill Freeman (nnepaui@frontiernet.net)  
**Cc:** McDaniel, James; Hoekstra, Kurt; Divine, Olan; Weber, Justin; Shelby, Ray; Percell, Bob; Weaver, John  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good Morning All,  
XTO plans to complete the following actions for this site. The release point area will be scraped up as requested and gypsum will be applied to the release area by raking and spreading of the gypsum. After the application of gypsum to the impacted area XTO will consider this site closed and an initial C-141 documentation will be submitted with actions taken.

Thank you for your time and have a great day!

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

**XTO ENERGY INC.**, an ExxonMobil subsidiary

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**From:** Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]  
**Sent:** Wednesday, March 15, 2017 7:12 AM  
**To:** Hixon, Logan <Logan\_Hixon@xtoenergy.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Bill Freeman (nnepaui@frontiernet.net) <nnepaui@frontiernet.net>; Steve Austin <nnepawq@frontiernet.net>  
**Cc:** McDaniel, James <James\_McDaniel@xtoenergy.com>; Hoekstra, Kurt <Kurt\_Hoekstra@xtoenergy.com>; Divine, Olan <Olan\_Divine@xtoenergy.com>; Weber, Justin <Justin\_Weber@xtoenergy.com>; Shelby, Ray <Ray\_Shelby@xtoenergy.com>; Percell, Bob <Bob\_Percell@xtoenergy.com>; Weaver, John <John\_Weaver@xtoenergy.com>  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good morning Logan,

After review, if XTO would like to propose to use the 19.15.17 standards to clear the release on this site it appears to be an acceptable alternative. However, please note 19.15.17.13.H(3) requires **"a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0."** This requirement appears to be more restrictive than what was previously approved.



Please also note you may want to copy Steve Austin with the NNEPA as I believe Mr. Freeman has retired.

Thank you,  
Vanessa Fields  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 119  
Cell: (505) 419-0463  
[vanessa.fields@state.nm.us](mailto:vanessa.fields@state.nm.us)

**From:** Hixon, Logan [[mailto:Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)]  
**Sent:** Friday, March 10, 2017 3:38 PM  
**To:** Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Bill Freeman ([nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)) <[nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)>  
**Cc:** McDaniel, James <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>; Divine, Olan <[Olan\\_Divine@xtoenergy.com](mailto:Olan_Divine@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; Shelby, Ray <[Ray\\_Shelby@xtoenergy.com](mailto:Ray_Shelby@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Weaver, John <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good Afternoon All,  
We wanted to ask the question if referencing Table 1 standards, it would seem that 20,000 ppm chloride is protective of the environment according to the pit rule and produced water rule when groundwater is greater than (100) one hundred feet. We wanted to know why that would not be the case in this scenario where groundwater is greater than 100 feet, no significant water courses exists within 100 feet, and no water sources with 200 feet?

Thanks for the help, and have a great weekend!

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |  
Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)  
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**From:** Fields, Vanessa, EMNRD [<mailto:Vanessa.Fields@state.nm.us>]  
**Sent:** Wednesday, March 08, 2017 9:56 AM  
**To:** Hixon, Logan <[Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)>; Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Bill Freeman ([nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)) <[nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)>



Cc: McDaniel, James <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>; Divine, Olan <[Olan\\_Divine@xtoenergy.com](mailto:Olan_Divine@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; Shelby, Ray <[Ray\\_Shelby@xtoenergy.com](mailto:Ray_Shelby@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Weaver, John <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>

**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good morning Logan,

The initial C-141 has been approved for the NV Navajo 35-1 Water Manifold. As discussed previously please scrape the top portion of the affected areas and apply gypsum per spec sheet.

You can find the initial C-141 on the OCD website under Images, Administrative and Environmental Orders, 3RP-1044.

Please let me know if you have any questions.

Thank you,

Vanessa Fields  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 119  
Cell: (505) 419-0463  
[vanessa.fields@state.nm.us](mailto:vanessa.fields@state.nm.us)

**From:** Fields, Vanessa, EMNRD

**Sent:** Thursday, February 9, 2017 1:19 PM

**To:** 'Hixon, Logan' <[Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)>; Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Bill Freeman ([nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net)) <[nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net)>

**Cc:** McDaniel, James <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>; Divine, Olan <[Olan\\_Divine@xtoenergy.com](mailto:Olan_Divine@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; Shelby, Ray <[Ray\\_Shelby@xtoenergy.com](mailto:Ray_Shelby@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Weaver, John <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>

**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Thank you Logan.

Vanessa Fields  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 119  
Cell: (505) 419-0463  
[vanessa.fields@state.nm.us](mailto:vanessa.fields@state.nm.us)



**From:** Hixon, Logan [[mailto:Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)]

**Sent:** Thursday, February 9, 2017 12:55 PM

**To:** Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Bill Freeman ([nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net)) <[nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net)>  
**Cc:** McDaniel, James <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>; Divine, Olan <[Olan\\_Divine@xtoenergy.com](mailto:Olan_Divine@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; Shelby, Ray <[Ray\\_Shelby@xtoenergy.com](mailto:Ray_Shelby@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Weaver, John <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Start: 36.68529890481074, -108.2708031312639

Sample at middle: 36.68568874712724, -108.2703572978343

End: 36.68609795164008, -108.2697636914516

These are the rough coordinates. Let us know if you need any further information.

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**From:** Fields, Vanessa, EMNRD [<mailto:Vanessa.Fields@state.nm.us>]

**Sent:** Thursday, February 09, 2017 11:23 AM

**To:** Hixon, Logan; Powell, Brandon, EMNRD; Smith, Cory, EMNRD; Bill Freeman ([nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net))

**Cc:** McDaniel, James; Hoekstra, Kurt; Divine, Olan; Weber, Justin; Shelby, Ray; Percell, Bob; Weaver, John

**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good morning Logan,

Could you please provide me with the Lat/Long of the release point and end point?

Thank you,

Vanessa Fields

Environmental Specialist

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 119

Cell: (505) 419-0463

[vanessa.fields@state.nm.us](mailto:vanessa.fields@state.nm.us)



**From:** Hixon, Logan [[mailto:Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)]  
**Sent:** Thursday, February 9, 2017 10:34 AM  
**To:** Powell, Brandon, EMNRD <[Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; Bill Freeman ([nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)) <[nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net)>  
**Cc:** McDaniel, James <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>; Divine, Olan <[Olan\\_Divine@xtoenergy.com](mailto:Olan_Divine@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; Shelby, Ray <[Ray\\_Shelby@xtoenergy.com](mailto:Ray_Shelby@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Weaver, John <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Email 2

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**From:** Hixon, Logan  
**Sent:** Thursday, February 09, 2017 10:32 AM  
**To:** BRANDON POWELL ([brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)); Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; Bill Freeman ([nnepaui@frontiernet.net](mailto:nnepaui@frontiernet.net))  
**Cc:** McDaniel, James ([James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)); Hoekstra, Kurt; Divine, Olan; Weber, Justin; Shelby, Ray; Percell, Bob; Weaver, John ([John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com))  
**Subject:** RE: 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

I will have to send it in two separate emails due to size restrictions.

Email 1

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

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Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**From:** Hixon, Logan  
**Sent:** Thursday, February 09, 2017 10:31 AM



**To:** BRANDON POWELL ([brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)); Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; Bill Freeman ([nnepauic@frontiernet.net](mailto:nnepauic@frontiernet.net))  
**Cc:** McDaniel, James ([James.McDaniel@xtoenergy.com](mailto:James.McDaniel@xtoenergy.com)); Hoekstra, Kurt; Divine, Olan; Weber, Justin; Shelby, Ray; Percell, Bob; Weaver, John ([John.Weaver@xtoenergy.com](mailto:John.Weaver@xtoenergy.com))  
**Subject:** 2017-2-1 NV Navajo 35-1 Wtr Manifold Release

Good Morning,

Attached for your reference are the analytical results and on-site form taken on February 1, 2017 from the NV Navajo 35-1 water manifold release, where approximately 10 bbls of produced water was released from a gas eliminator that had frozen and split. XTO proposes to remediate the impacted area with gypsum, in the source area and continuously for 25 feet downstream. Approximately 160 lbs. of gypsum at an application rate of 1 lb. per linear feet approximately will be used in the impacted area by raking and spreading of the gypsum. After the application of gypsum to the impacted area XTO will consider this site closed and an initial C-141 documentation will be submitted with actions taken.

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan.Hixon@xtoenergy.com](mailto:Logan.Hixon@xtoenergy.com)

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XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



Flow Path Before Vegetation Removal



Flow Path Before Vegetation Removal



XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



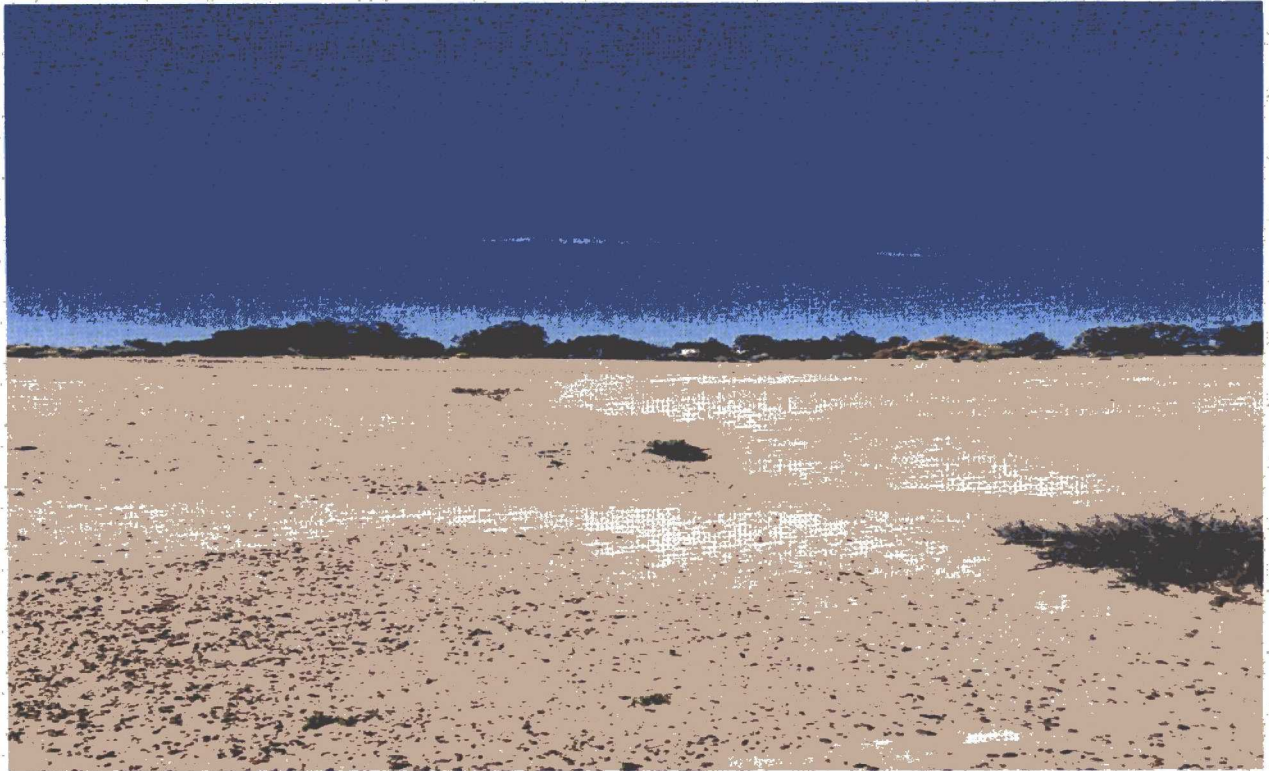
Flow Path Before Vegetation Removal



Flow Path Before Vegetation Removal



XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



Flow Path Before Vegetation Removal



Flow Path Before Vegetation Removal



XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



Flow Path Before Vegetation Removal



Flow Path Before Vegetation Removal



XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



Flow Path Before Vegetation Removal



Flow Path after removal of vegetation



XTO Energy, Inc.  
NV Navajo 35-1 Manifold  
Section 35 (A), Township 29N, Range 14W



Flow Path after removal of vegetation