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

Revised August 8, 2011

Form C-141

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

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

| | Release Notification and Corrective Action | | | | | | | | | | | | |
|--|---|--|--|--|---|---|---|--|---|---|--|---|--|
| | | | | | | OPERATOR Initial Report Final Re | | | | | | | |
| Name of Co | mpany: X | TO Energy, | Inc. | | (| Contact: Ku | rt Hoekstra | | | | | | |
| | | 00, Aztec, N | lew Mexi | ico 87410 | | | No.: (505) 333-3 | | | | | | |
| Facility Nar | ne: Lunt F | C # 5 | | | | Facility Typ | e: Gas Well (Ba | asin Fr | uitland Co | al) | | | |
| Surface Ow | ner: Feder | al | | Mineral C | wner | API No. 30-045-34034 | | | | | | | |
| | | | | LOCA | TION | OF REI | LEASE | | | | | | |
| Unit Letter | Section | Township | Range | Feet from the | North/ | South Line | Feet from the | East/ | West Line | County | | | |
| N | 6 | 30N | 13W | 730 | | FSL | 840 | | FWL | | San Ju | an | |
| | | | I | Latitude: 36.836 | 592 | Longitude: | -108.24868 | | | | | | |
| | | | | NAT | URE | OF REL | | | | | | | |
| Type of Rele | | | | | | | Release: 200 BB | | | Recovered: 2 | | | |
| Source of Re | lease: Gas I | Eliminator Va | lve | | | Unknown | Iour of Occurrenc | ee | | Hour of Dis 7 @ 10:25a | | ; | |
| Was Immedia | ate Notice (| | V [| I No. III No. | | If YES, To | Whom? | | | | | | |
| Dr. Whom? I | Zust Haalest | ra XTO Energ | | No Not Re | equired | | Hour: 2-16-2017 (| @ 1.25. | | | | | |
| Was a Water | | | sy | | | | olume Impacting t | | | | | | |
| | | | Yes 🗵 | No | | | | | OIL C | ONS. DIV | DIST | Г. З | |
| If a Watercon | If a Watercourse was Impacted, Describe Fully.* FEB 2 4 2017 | | | | | | | | | | | | |
| produced wa 2:45pm. 2-16 was ranked a and an estima BTEX. The s for BTEX US | ter stayed in 5-2017. XT0 20 pursuan ated depth to soil was san SEPA Meth | nside the berm D, EHS collect It to the NMO o groundwate Inpled for TPH od 8021. A sp | and the pated a soil CD Guide between via USEF will has been | on Taken.* A gas educate tank cellar. Van sample from below the Remote 50 and 100 feet. The A Method 8015, en confirmed at the | nessa Fiew the some diation This will for BTE is location | elds NMOCD urce of the le of Leaks, Sp set the closu X via USEP on. | was notified at 1 ak and a produced ills and Releases of the standards to 10 A Method 8021, a | :35 pm. d water due to c 00 ppm nd for c | 2-16-2017 sample fror distance to s TPH, 10 pp chlorides. T | and arrived in the pit tan surface water im benzene a he produced | on loca k cellar r 200-1 and 50 p | ation at The site 000 feet, ppm total was sampled | |
| confirmed at (attached) we | this locatio ere below re | n. A water tru egulatory stand | ck was ca dards, and | ken.*Due to 200 E lled and 200 BBL no further action | s of proc is requir | duced water v | was recovered from | m insid | e the berm a | and cellar Ti | he samp | ole results | |
| regulations a public health should their or or the enviro | Il operators or the envi- operations h nment. In a | are required to ronment. The lave failed to a | o report and acceptant adequately OCD accept | e is true and comp nd/or file certain r ce of a C-141 repo y investigate and r otance of a C-141 | elease nort by the emediate | otifications as NMOCD m contaminati | nd perform correct arked as "Final R on that pose a thr | etive acteport" (eat to g | tions for rele does not rele round water | eases which ieve the ope r, surface wa | may er rator of ater, hu | ndanger liability man health | |
| Signature: / | | | , | | | Approved by | OIL CON | | | DIVISIO |)) | | |
| Printed Name | | KSIFA | | | | | 010/10 | | Nu | | | | |
| Title: EHS C | oordinator | | | | | Approval Dat | te:5/8/01 | | Expiration | Date: | | | |
| E-mail Addre | ess: Kurt_H | oekstra@xtoe | nergy.con | n | | Conditions of | | | | Attached | | | |
| Date: 2-22-2 | 2017 | Phone: | 505-333- | 3100 | | NYFI | 70483 | 80 | 30 | / Italianou | | | |
| Attach Addi | tional Shee | ets If Necess | ary | | | | | | | | | | |



ANALYTICAL REPORT

February 21, 2017



XTO Energy - San Juan Division

Sample Delivery Group:

L891087

Samples Received:

02/18/2017

Project Number:

30-045-34034

Description:

Lunt FC #5

Site:

LUNT FC-5

Report To:

Kurt Hoekstra

382 County Road 3100

Aztec, NM 87410

Entire Report Reviewed By:

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.

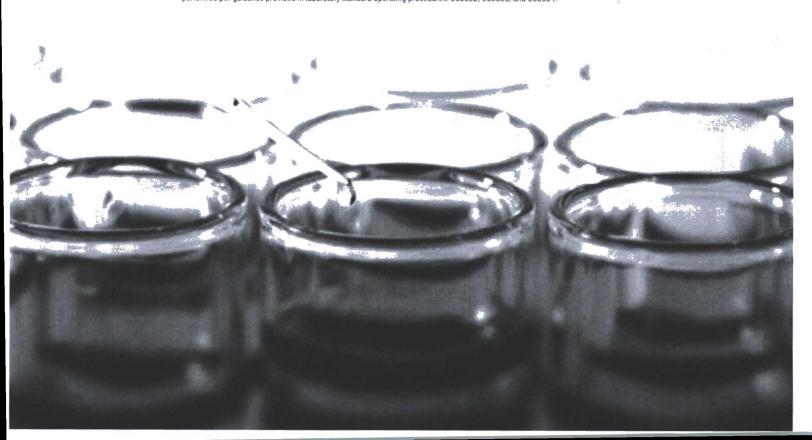


TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

| 1 | |
|----|---|
| 2 | Ср |
| 3 | |
| 4 | |
| 5 | ³ Ss |
| 5 | 4_ |
| 6 | Cn |
| 7 | ⁵ Sr |
| 7 | |
| 8 | ⁶ Qc |
| 9 | 7 |
| 11 | GI_ |
| 12 | 8 AI |
| 13 | |
| 14 | ⁹ Sc |
| 15 | |
| | 3 4 5 5 6 7 7 8 9 11 12 13 |



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

| FARKH-021617-1300 L891087-01 GW | | | Collected by Kurt Hoekstra | Collected date/time 02/16/17 13:00 | Received date/time 02/18/17 09:00 |
|---|----------|----------|-------------------------------|---------------------------------------|--------------------------------------|
| Method | Batch | Dilution | Preparation | Analysis | Analyst |
| | | | date/time | date/time | |
| Volatile Organic Compounds (GC) by Method 8021B | WG953665 | 1 | 02/20/17 04:57 | 02/20/17 04:57 | BMB |
| | | | | | |
| | | | Collected by | Collected date/time | Received date/time |
| FARKH-021617-1400 L891087-02 Solid | | | Kurt Hoekstra | 02/16/17 14:00 | 02/18/17 09:00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst |
| | | | date/time | date/time | |
| Semi-Volatile Organic Compounds (GC) by Method 8015 | WG953083 | 1 | 02/20/17 09:36 | 02/20/17 15:51 | KLM |
| Total Solids by Method 2540 G-2011 | WG953975 | 1 | 02/20/17 13:52 | 02/20/17 13:59 | MEL |
| Volatile Organic Compounds (GC) by Method 8015D/GRO | WG953710 | 1 | 02/18/17 18:34 | 02/20/17 02:47 | JAH |
| Volatile Organic Compounds (GC) by Method 8021B | WG953710 | 1 | 02/18/17 18:34 | 02/20/17 02:25 | JAH |
| Wet Chemistry by Method 9056A | WG953634 | 1 | 02/20/17 12:12 | 02/21/17 03:42 | SAM |



Cp

²Tc

⁴Cn

⁵Sr

⁶Qc

⁷GI

⁸AI



10-

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.

3

⁵Sr

⁶Qc

⁷GI

⁸AI

⁹Sc

Daphne Richards

Technical Service Representative

Dapline R Richards

FARKH-021617-1300 Collected date/time: 02/16/17 13:00

SAMPLE RESULTS - 01

- 01 ONE LAB. NATIONWIDE.

L891087

Volatile Organic Compounds (GC) by Method 8021B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------------------------------|---------|-----------|----------|----------|------------------|----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Benzene | 0.00111 | | 0.000500 | 1 | 02/20/2017 04:57 | WG953665 |
| Toluene | 0.00403 | | 0.00100 | 1 | 02/20/2017 04:57 | WG953665 |
| Ethylbenzene | ND | | 0.000500 | 1 | 02/20/2017 04:57 | WG953665 |
| Total Xylene | 0.0523 | | 0.00150 | 1 | 02/20/2017 04:57 | WG953665 |
| (S) a,a,a-Trifluorotoluene(PID) | 89.9 | | 80.0-121 | | 02/20/2017 04:57 | WG953665 |















FARKH-021617-1400 Collected date/time: 02/16/17 14:00

Analyte

Chloride

SAMPLE RESULTS - 02

Dilution

Analysis

date / time

02/21/2017 03:42

Batch

WG953634

ONE LAB. NATIONWIDE.



Wet Chemistry by Method 9056A

| | Result | Qualifier | Dilution | Analysis | Batch |
|--------------|--------|-----------|----------|------------------|----------|
| Analyte | % | | | date / time | |
| Total Solids | 85.2 | | 1 | 02/20/2017 13:59 | WG953975 |

Qualifier

RDL (dry)

mg/kg

11.7



Tc

Cn



Volatile Organic Compounds (GC) by Method 8015D/8021B/GRO

Result (dry)

mg/kg

732

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---------------------------------|--------------|-----------|-----------|----------|------------------|----------|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Benzene | ND | | 0.000587 | 1 | 02/20/2017 02:25 | WG953710 |
| TPH (GC/FID) Low Fraction | ND | | 0.117 | 1 | 02/20/2017 02:47 | WG953710 |
| Toluene | ND | | 0.00587 | 1 | 02/20/2017 02:25 | WG953710 |
| Ethylbenzene | ND | | 0.000587 | 1 | 02/20/2017 02:25 | WG953710 |
| Total Xylene | ND | | 0.00176 | 1 | 02/20/2017 02:25 | WG953710 |
| (S) a,a,a-Trifluorotoluene(FID) | 89.8 | | 77.0-120 | | 02/20/2017 02:47 | WG953710 |
| (S) a,a,a-Trifluorotoluene(PID) | 99.8 | | 75.0-128 | | 02/20/2017 02:25 | WG953710 |
| | | | | | | |



| 9 | | ' ' | | | | |
|----------------------------|--------------|-----------|-----------|----------|------------------|----------|
| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
| Analyte | mg/kg | | mg/kg | | date / time | |
| TPH (GC/FID) High Fraction | ND | | 4.69 | 1 | 02/20/2017 15:51 | WG953083 |
| (S) o-Terphenyl | 70.9 | | 18.0-148 | | 02/20/2017 15:51 | WG953083 |

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L891087-02

Method Blank (MB)

(MB) R3198076-1 02/20/17 13:59

MB Result % MB Qualifier MB MDL

%

MB RDL

%

Analyte Total Solids

0.000700

L891147-01 Original Sample (OS) • Duplicate (DUP)

(OS) L891147-01 02/20/17 13:59 • (DUP) R3198076-3 02/20/17 13:59

Original Result DUP Result

Dilution DUP RPD

DUP Qualifier DUP RPD Limits

Analyte

1

%

O/

Total Solids

83.5

% 83.6 % 0.145

_

5

Laboratory Control Sample (LCS)

(LCS) R3198076-2 02/20/17 13:59

Spike Amount

LCS Result

LCS Rec.

Rec. Limits % LCS Qualifier

Analyte Total Solids % 50.0 % 50.0

100

85.0-115

ACCOUNT:

XTO Energy - San Juan Division

PROJECT:

30-045-34034

SDG:

L891087

DATE/TIN 02/21/17 13

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L891087-02

Method Blank (MB)

(MB) R3198135-1 02/20/17 14:25

MB Result

MB Qualifier MB I

MB MDL

MB RDL

Analyte Chloride mg/kg U mg/kg 0.795 mg/kg 10.0

DUP RPD

L890640-01 Original Sample (OS) • Duplicate (DUP)

| (OS) | L890640-01 | 02/20/17 18:51 • | (DUP) R3198135-4 | 02/20/17 19:11 |
|------|------------|------------------|------------------|----------------|
|------|------------|------------------|------------------|----------------|

Original Result DUP Result mg/kg mg/kg

Dilution

DUP Qualifier DUP RPD Limits

%

Analyte Chloride

Analyte

Chloride

48.7

mg/kg 48.6

0

15

L890824-08 Original Sample (OS) • Duplicate (DUP)

(OS) L890824-08 02/20/17 23:57 • (DUP) R3198135-7 02/21/17 00:18

Origina mg/kg

45.6

Original Result DUP Result mg/kg mg/kg

45.5

Dilution DUP RPD %

0

DUP Qualifier DUP

DUP RPD Limits

% 15

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

(LCS) R3198135-2 02/20/17 14:46 • (LCSD) R3198135-3 02/20/17 15:06

| | 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 | 200 | 199 | 100 | 100 | 80-120 | | | 0 | 15 |

L890824-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L890824-02 02/20/17 20:33 • (MS) R3198135-5 02/20/17 20:54 • (MSD) R3198135-6 02/20/17 21:14

| (03) 2030024-02 02/20/ | 3) 203002+02 02/20/11 20.33 · (MS) K3130133-3 · 02/20/11 20.34 · (MSD) K3130133-0 · 02/20/11 21.14 | | | | | | | | | | | |
|------------------------|--|------------------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|---|--|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | R | |
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | | % | |
| Chloride | 500 | 50.0 | 555 | 543 | 101 | 99 | 1 | 80-120 | | | 2 | |

ACCOUNT:

XTO Energy - San Juan Division

PROJECT:

30-045-34034

SDG:

L891087

DATE/TIN 02/21/17 13

QUALITY CONTROL SUMMARY

Volatile Organic Compounds (GC) by Method 8015D/8021B/GRO

L891087-02

Method Blank (MB)

| (MB) R3197967-5 02/19/17 | 21:57 | | | |
|---------------------------------|-----------|--------------|----------|----------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/kg | | mg/kg | mg/kg |
| Benzene | U | | 0.000120 | 0.000500 |
| Toluene | 0.000576 | <u>J</u> | 0.000150 | 0.00500 |
| Ethylbenzene | 0.000186 | <u>J</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) | 93.4 | | | 77.0-120 |
| (S) a,a,a-Trifluorotoluene(PID) | 102 | | | 75.0-128 |

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

| (LCS) R3197967-1 02/19/17 20:06 • (LCSD) R3197967-2 02/19/17 20:28 | | | | | | | | | | | |
|--|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|-------|-------------------|--|
| | 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 | % | % | % | | | % | % | |
| Benzene | 0.0500 | 0.0475 | 0.0473 | 94.9 | 94.5 | 71.0-121 | | | 0.420 | 20 | |
| Toluene | 0.0500 | 0.0475 | 0.0458 | 94.9 | 91.7 | 72.0-120 | | | 3.52 | 20 | |
| Ethylbenzene | 0.0500 | 0.0467 | 0.0461 | 93.4 | 92.1 | 76.0-121 | | | 1.40 | 20 | |
| Total Xylene | 0.150 | 0.144 | 0.140 | 95.7 | 93.3 | 75.0-124 | | | 2.54 | 20 | |
| (S) a,a,a-Trifluorotoluene(FID |)) | | | 92.6 | 93.2 | 77.0-120 | | | | | |
| (S) a,a,a-Trifluorotoluene(PIE |)) | | | 101 | 101 | 75.0-128 | | | | | |

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

| (LCS) R3197967-3 02/19/17 | 20:51 • (LCSD) | R3197967-4 | 2/19/17 21:13 | | | | | | | |
|---------------------------------|----------------|------------|---------------|----------|-----------|-------------|---------------|----------------|------|-------------------|
| | 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 | % | % | % | | | % | % |
| TPH (GC/FID) Low Fraction | 5.50 | 5.38 | 5.29 | 97.8 | 96.3 | 70.0-136 | | | 1.59 | 20 |
| (S) a,a,a-Trifluorotoluene(FID) | | | | 103 | 103 | 77.0-120 | | | | |
| (S) a,a,a-Trifluorotoluene(PID) | | | | 111 | 110 | 75.0-128 | | | | |
| | | | | | | | | | | |

L890560-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L890560-01 02/20/17 | 00:56 • (MS) R | R3197967-6 02 | 2/19/17 22:42 • (| (MSD) R319796 | 7-7 02/19/17 2 | 3:05 | | | | | |
|---------------------------------|----------------|------------------------|-------------------|---------------|----------------|----------|----------|-------------|--------------|---------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | R |
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | | % |
| Benzene | 0.0500 | ND | 0.0167 | 0.00603 | 33.4 | 12.1 | 1 | 10.0-146 | | <u>J3</u> | 9 |
| Toluene | 0.0500 | ND | 0.0171 | 0.00635 | 33.9 | 12.3 | 1 | 10.0-143 | | <u>J3</u> | 9 |
| Ethylbenzene | 0.0500 | ND | 0.0179 | 0.00653 | 35.5 | 12.7 | 1 | 10.0-147 | | <u>J3</u> | 9 |
| Total Xylene | 0.150 | ND | 0.0553 | 0.0207 | 36.3 | 13.2 | 1 | 10.0-149 | <u>J6</u> | <u>J3 J6</u> | 9 |
| (S) a,a,a-Trifluorotoluene(FID) | | | | | 91.1 | 91.4 | | 77.0-120 | | | |
| | | | | | | | | | | | |

 ACCOUNT:
 PROJECT:
 SDG:
 DATE/TIN

 XTO Energy - San Juan Division
 30-045-34034
 L891087
 02/21/17 13

QUALITY CONTROL SUMMARY

WG953710 Volatile Organic Compounds (GC) by Method 8015D/8021B/GRO

L890560-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L890560-01 02/20/17 | 00:56 • (MS) F | R3197967-6 02 | 2/19/17 22:42 • | (MSD) R319796 | 67-7 02/19/17 2 | 23:05 | | | | | |
|---------------------------------|----------------|------------------------|-----------------|---------------|-----------------|----------|----------|-------------|--------------|---------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | R |
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | | % |
| (S) a,a,a-Trifluorotoluene(PID) | | | | | 99.0 | 99.7 | | 75.0-128 | | | |

ACCOUNT:

XTO Energy - San Juan Division

PROJECT: 30-045-34034

SDG: L891087

DATE/TIN 02/21/17 13

QUALITY CONTROL SUMMARY

Volatile Organic Compounds (GC) by Method 8021B

L891087-01

Method Blank (MB)

| (MB) R3198029-3 02/19/17 | 21:13 | | | |
|---------------------------------|-----------|--------------|----------|----------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/l | | mg/l | mg/l |
| Benzene | U | | 0.000190 | 0.000500 |
| Toluene | U | | 0.000412 | 0.00100 |
| Ethylbenzene | U | | 0.000160 | 0.000500 |
| Total Xylene | U | | 0.000510 | 0.00150 |
| (S) a,a,a-Trifluorotoluene(PID) | 91.0 | | | 80.0-121 |

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

| (LCS) R3198029-1 02 | 2/19/17 20:07 • (LCSE | D) R3198029-2 | 2 02/19/17 20:2 | 9 | | | | | | |
|--------------------------|-----------------------|---------------|-----------------|----------|-----------|-------------|---------------|----------------|------|------------|
| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
| Analyte | mg/l | mg/l | mg/l | % | % | % | | | % | % |
| Benzene | 0.0500 | 0.0536 | 0.0527 | 107 | 105 | 71.0-121 | | | 1.82 | 20 |
| Toluene | 0.0500 | 0.0525 | 0.0518 | 105 | 104 | 72.0-120 | | | 1.42 | 20 |
| Ethylbenzene | 0.0500 | 0.0543 | 0.0533 | 109 | 107 | 75.0-122 | | | 1.77 | 20 |
| Total Xylene | 0.150 | 0.170 | 0.165 | 113 | 110 | 74.0-124 | | | 3.10 | 20 |
| (S) a,a,a-Trifluorotolue | ne(PID) | | | 96.6 | 100 | 80.0-121 | | | | |

L889435-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L889435-02 02/19/1 | 7 22:42 • (MS) F | R3198029-4 02 | 2/19/17 23:04 | • (MSD) R31980 | 29-5 02/19/1 | 17 23:26 | | | | | |
|--------------------------------|------------------|-----------------|---------------|----------------|--------------|----------|----------|-------------|--------------|---------------|----|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | R |
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % |
| Benzene | 0.0500 | 0.000660 | 0.0345 | 0.0340 | 67.6 | 66.7 | 1 | 29.0-146 | | | 1. |
| Toluene | 0.0500 | 0.000691 | 0.0367 | 0.0363 | 72.1 | 71.1 | 1 | 35.0-140 | | | 1. |
| Ethylbenzene | 0.0500 | 0.00412 | 0.0455 | 0.0449 | 82.8 | 81.5 | 1 | 39.0-143 | | | 1. |
| Total Xylene | 0.150 | 0.00704 | 0.145 | 0.142 | 91.8 | 90.2 | 1 | 42.0-142 | | | 1. |
| (S) a,a,a-Trifluorotoluene(Pla | D) | | | | 149 | 145 | | 80.0-121 | <u>J1</u> | <u>J1</u> | |

ACCOUNT: XTO Energy - San Juan Division PROJECT: 30-045-34034

SDG: L891087 **DATE/TIN** 02/21/17 13

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L891087-02

Method Blank (MB)

......

| (MB) R3198030-1 (| 02/20/17 14:08 |
|-------------------|----------------|
|-------------------|----------------|

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------------------------|-----------|--------------|--------|----------|
| Analyte | mg/kg | | mg/kg | mg/kg |
| TPH (GC/FID) High Fraction | U | | 0.769 | 4.00 |
| (S) o-Terphenyl | 57.9 | | | 18.0-148 |

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

| (LCS) R3198030-2 02/20/ | 17 14:20 • (LCS | D) R3198030-3 | 3 02/20/17 14:3 | 31 | | | | | | |
|----------------------------|-----------------|---------------|-----------------|----------|-----------|-------------|---------------|----------------|------|------------|
| | 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 | % | % | % | | | % | % |
| TPH (GC/FID) High Fraction | 60.0 | 48.0 | 46.7 | 79.9 | 77.9 | 50.0-150 | | | 2.62 | 20 |
| (S) o-Terphenyl | | | | 90.3 | 87.7 | 18.0-148 | | | | |

L889332-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L889332-03 02/20/ | 17 14:42 • (MS) F | R3198030-4 02 | 2/20/17 14:53 • | (MSD) R31980 | 30-5 02/20/ | 17 15:05 | | | | | |
|----------------------------|--------------------|-----------------------|-----------------|---------------------|-------------|----------|----------|-------------|--------------|---------------|----|
| | Spike Amount (dry) | Original Result (dry) | MS Result (dry) | MSD Result (dry) | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | R |
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | | % |
| TPH (GC/FID) High Fraction | 62.4 | ND | 56.0 | 47.5 | 89.8 | 76.1 | 1 | 50.0-150 | | | 16 |
| (S) o-Terphenyl | | | | | 94.6 | 84.6 | | 18.0-148 | | | |

ACCOUNT: XTO Energy - San Juan Division PROJECT: 30-045-34034

SDG: L891087 **DATE/TIN** 02/21/17 13

Abbreviations and Definitions

low.

J

J1

J3

J6

| 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 |

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

Surrogate recovery limits have been exceeded; values are outside upper control limits.

The associated batch QC was outside the established quality control range for precision.

The sample matrix interfered with the ability to make any accurate determination; spike value is



















²Tc ³Ss ⁴Cn

Sc

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 conductive 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 |
| Conneticut | PH-0197 | North Carolina 1 | DW21704 |
| Florida | E87487 | North Carolina 2 | 41 |
| Georgia | NELAP | North Dakota | R-140 |
| Georgia 1 | 923 | Ohio-VAP | CL0069 |
| daho | TN00003 | Oklahoma | 9915 |
| llinois | 200008 | Oregon | TN200002 |
| ndiana | C-TN-01 | Pennsylvania | 68-02979 |
| owa | 364 | Rhode Island | 221 |
| Cansas | E-10277 | South Carolina | 84004 |
| Centucky 1 | 90010 | South Dakota | n/a |
| Centucky ² | 16 | Tennessee 14 | 2006 |
| ouisiana | Al30792 | Texas | T 104704245-07-TX |
| Maine | TN0002 | Texas 5 | 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 |
| lissouri | 340 | Wisconsin | 9980939910 |
| Montana | CERTO086 | Wyoming | A2LA |
| lebraska | NE-OS-15-05 | | |

Third Party & Federal Accreditations

| A2LA - ISO 17025 | 1461.01 | AIHA | 100789 |
|-------------------|---------|------|---------|
| A2LA - ISO 170255 | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | S-67674 |
| EPA-Crypto | TN00003 | | |

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{-/a} 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:

PROJECT:

SDG:

DATE/TIME:

PAGE:

| - | | Quet | Number | mark the same | | | | | An | alysis | s/Conta |
|------------------------------|------------|----------------------------------|-------------|-----------------------------------|----------------------------------|--|------------------|----------|-------|----------|--|
| | | Quote Number | | Page of | | | | | | | |
| XTO | | XTO Contact | | XTO Contact Phone # 505-486-954 3 | | | | | | | |
| ENERGY | | Email | | Results to: | | | 1 | | | | |
| Western Division | | JAMES KUR | | | | - 1 1 | | | | | |
| Well Site/Location | API Number | | | Saturday Delivery(Y) N) | | | | 1208 | | | |
| LUNT FC \$ 5 | | 30-045 - 34034 Samples on Ice | | | | | | | | | |
| Collected By | | Samples on ice | | | <u>Turnaround</u> Standard | | | | | | |
| Company , | Company , | | Test Reason | | | Next Day | | | 110 | 1 | |
| XTb / | | SPILL | | | Two Day Three Day | | | | 8015 | CHORIDE | |
| Signature | | Gray Areas for Lab Use Only! | | | Same Day | | | | | | |
| Just Harpely | 6 | Gray Areas | or Lab Use | Only | Date N | eeded | | TA | ũ | 9 | |
| Sample ID | | ple Name | Media | Date | Time | Preservative | No. of Conts. | F | BTEX | | |
| FARKH-021617-1300 | PRODUCE | NATER CAL | AR P/W | 2-16 | 1100 | HCI | (2) YOC | | X | X | |
| FARYH-BZIBIT -1400 | וחצים | BERM | 5 | 2-16 | 2:00 | ON ICE | | X | X | X | _ |
| | | | | | - | - | - | \vdash | | | _ |
| | | | | | | | | | | | _ |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | - | | - | - | - |
| | | | | | | | | | | | |
| , | , | | | | | | | | | | |
| | bater = WV | / Groundwater | = GW Dri | nking W | aster = D | W Sludge = SG St | ırface Water | = SW | Air = | A D | rill Mud |
| Relinguished By: (Signoture) | | | Date: 2-17- | 17 | Time: | Received By: (Si | gnature) | 126 | 2 | | Nu |
| Relinquished By: (Signature) | | | Date: | | Time: | | | | | | Ter |
| Relinquished By: (Signature) | | | Date: | | Time: Received for Lab by (Signa | | | | | | Do |
| Comments | | | | | | The View View View View View View View Vie | PL OF LONGISHERS | | | OHNIGATI | A STATE OF THE PARTY OF THE PAR |

^{*} Sample ID will be the office and sampler-date-military time FARIM-MMDDYY-1200

| | ESC LAB SCIENCES | |
|--------------------------------------|---------------------|-----|
| | Cooler Receipt Form | |
| Client: | XTORNM SDG# | 18 |
| Cooler Received/Opened On: 2/ 18 /17 | Temperature: 3.4 | |
| Received By: jon deboard | | |
| Signature: Le Moour | | |
| 7 | | |
| Receipt Check List | NP | Yes |
| COC Seal Present / Intact? | | 1 |
| COC Signed / Accurate? | | ~ |
| Bottles arrive intact? | | 4 |
| Correct bottles used? | | V |
| Sufficient volume sent? | | 1 |
| If Applicable | - | |
| VOA Zero headspace? | | |
| Preservation Correct / Checked? | | |

ESC Lab Sciences Non-Conformance Form

| ogin #: L891087 Client: | | TORNM Da | ate: 2/18/17 | Evaluated by: Jeremy | | |
|--------------------------------|---------|-----------------------------------|----------------|---|--|--|
| Non-Conformance (che | ck appl | icable items) | | | | |
| Sample Integrity | | Chain of Custody Clarification | | | | |
| Parameter(s) past holding time | × | Login Clarification Needed | | If Broken Container: | | |
| Improper temperature | | Chain of custody is incomplete | | Insufficient packing material around container | | |
| Improper container type | | Please specify Metals requested. | | Insufficient packing material inside cooler | | |
| Improper preservation | | Please specify TCLP requested. | | Improper handling by carrier (FedEx / UPS / Cou | | |
| Insufficient sample volume. | | Received additional samples not | listed on coc. | Sample was frozen | | |
| Sample is biphasic. | | Sample ids on containers do not i | match ids on | Container lid not intact | | |
| Vials received with headspa | ace. | Trip Blank not received. | | If no Chain of Custody: | | |
| Broken container | | Client did not "X" analysis. | | Received by: | | |
| Broken container: | | Chain of Custody is missing | | Date/Time: | | |
| Sufficient sample remains | | | | Temp./Cont. Rec./pH: | | |
| | | | | Carrier: | | |
| | | | | Tracking# | | |

- Login Comments:
 1. Received 1 Vial broken for GW sample. 1 remains
- 2. Did not receive Chloride sample for GW.

| Client informed by: | Call | Email | Voice Mail | Date: | Time: | |
|---------------------|------------|-------|------------|-------|-------|--|
| TSR Initials: | Client Con | tact: | | | | |

Login Instructions: