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.

# (Amended) Release Notification and Corrective Action

## OPERATOR

☐ Initial Report ☒ Final Report

| | |
|---|---|
| Name of Company: XTO Energy, Inc. | Contact: Kurt Hoekstra |
| Address: 382 Road 3100, Aztec, New Mexico 87410 | Telephone No.: (505) 333-3100 |
| Facility Name: Salty Dog SWD # 4 | Facility Type: Gas Well (Basin Fruitland Coal ) |

| | | |
|---|---|---|
| Surface Owner: Federal | Mineral Owner | API No. 30-045-32334 |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| K | 1 | 30N | 14W | 2580 | FSL | 1890 | FWL | San Juan |

**Latitude:** 36.8427 **Longitude:** -108.2629

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release: Produced Water | Volume of Release: 150 BBL | Volume Recovered: 20 BBL |
| Source of Release: 6" underground water transfer line | Date and Hour of Occurrence Unknown | Date and Hour of Discovery: 2-23-2017 @ 4:00 pm |
| Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required | If YES, To Whom? Vanessa Fields NMOCD | |
| By Whom? Kurt Hoekstra XTO Energy | Date and Hour: 2-23-2017 @ 4:10 pm | |
| Was a Watercourse Reached? ☒ Yes ☐ No | If YES, Volume Impacting the Watercourse. Approximately 150 BBL produced water | |

If a Watercourse was Impacted, Describe Fully.* Approximately 150 bbls of produced water was lost from a 6" water transfer line ponding on location, before flowing off location to the east, entering a small drainage feature, and eventually entering a wash south of the location. The water traveled for approximately 1,500 feet off location, and approximately 1,000 feet in the wash.

OIL CONS. DIV DIST. 3

APR 2 1 2017

Describe Cause of Problem and Remedial Action Taken: Approximately 150 bbls of produced water was lost from a 6" water transfer line ponding on location, before flowing off location to the east, entering a small drainage feature, and eventually entering a wash south of the location. The water traveled for approximately 1,500 feet off location, and approximately 1,000 feet in the wash. Vanessa Fields NMOCD was notified at 4:10 pm. 2-23-2017. The site was ranked a 20 pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases due to distance to surface water 200-1000 feet, and an estimated depth to groundwater between 50 and 100 feet, and distance to a domestic water source greater than 1,000 feet. This set the closure standards to 100 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. A spill has been confirmed at this location.

Describe Area Affected and Cleanup Action Taken.*Due to a produced water leak of 150 BBLs a release has been confirmed at this location. The line was shut in immediately and the leak was stopped. A water truck was called and 20 BBLs of produced water was recovered. Repairs were made to the 6" transfer line. The sample results (attached) collected on 4-6-2017 returned results below the regulatory requirements. No further action is 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: Kurt Hoekstra | OIL CONSERVATION DIVISION |
| Printed Name: Kurt Hoekstra | Approved by Environmental Specialist: Vanessa |
| Title: EHS Coordinator | Approval Date: 4/24/2017 Expiration Date: |
| E-mail Address: Kurt_Hoekstra@xtoenergy.com | Conditions of Approval: NVF1706731924 Attached ☐ |
| Date: 4-18-2017 Phone: 505-333-3100 | |

* Attach Additional Sheets If Necessary

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ESC A·B SCIENCES YOUR LAB OF CHOICE

# ANALYTICAL REPORT

April 12, 2017

myESC REAL TIME DATA ACCESS

## XTO Energy - San Juan Division

| | |
|---|---|
| Sample Delivery Group: | L901241 |
| Samples Received: | 04/07/2017 |
| Project Number: | SALTY DOG SWD 4 |
| Description: | Salty Dog SWD 4 |

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

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Technical Service Representative



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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

## CULVERT DISCH L901241-01 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:20 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969287 | 1 | 04/11/17 14:18 | 04/11/17 14:27 | MLW |
| Wet Chemistry by Method 9056A | WG968769 | 1 | 04/10/17 12:28 | 04/10/17 17:32 | KCF |

## CULVERT 100' L901241-02 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:22 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969287 | 1 | 04/11/17 14:18 | 04/11/17 14:27 | MLW |
| Wet Chemistry by Method 9056A | WG968769 | 1 | 04/10/17 12:28 | 04/10/17 18:03 | KCF |

## CULVERT 200' L901241-03 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:24 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969287 | 1 | 04/11/17 14:18 | 04/11/17 14:27 | MLW |
| Wet Chemistry by Method 9056A | WG968769 | 1 | 04/10/17 12:28 | 04/11/17 00:13 | KCF |

## CULVERT 300' L901241-04 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:25 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG968769 | 1 | 04/10/17 12:28 | 04/10/17 18:49 | KCF |

## BEG OF WASH L901241-05 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:27 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG968769 | 1 | 04/10/17 12:28 | 04/10/17 19:35 | KCF |

## WASH 100' L901241-06 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:30 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 16:44 | KCF |

## WASH 200' L901241-07 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:33 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 16:53 | KCF |

## WASH 300' L901241-08 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:35 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 17:11 | KCF |

## WASH 400' L901241-09 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:38 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 17:38 | KCF |

## WASH 500' L901241-10 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:40 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:05 | KCF |

## WASH 600' L901241-11 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:45 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:14 | KCF |

## WASH 800' L901241-12 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:47 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:23 | KCF |

## WASH 900' L901241-13 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:50 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969288 | 1 | 04/11/17 14:04 | 04/11/17 14:13 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:32 | KCF |

## WASH 1000' L901241-14 Solid

Collected by: Kurt Hoekstra | Collected date/time: 04/06/17 09:52 | Received date/time: 04/07/17 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG969289 | 1 | 04/11/17 13:30 | 04/11/17 13:48 | MLW |
| Wet Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:41 | KCF |

# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

| ND OF SPILL L901241-15 Solid | | | Collected by<br>Kurt Hoekstra | Collected date/time<br>04/06/17 09:55 | Received date/time<br>04/07/17 09:00 |
|---|---|---|---|---|---|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst |
| otal Solids by Method 2540 G-2011 | WG969289 | 1 | 04/11/17 13:30 | 04/11/17 13:48 | MLW |
| Net Chemistry by Method 9056A | WG969122 | 1 | 04/11/17 09:38 | 04/11/17 18:50 | KCF |

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

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|
| Total Solids | 84.9 | | 1 | 04/11/2017 14:27 | WG969287 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | | |
| Chloride | 58.6 | | 11.8 | 1 | 04/10/2017 17:32 | WG968769 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 89.0 | | 1 | 04/11/2017 14:27 | WG969287 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 359 | | 11.2 | 1 | 04/10/2017 18:03 | WG968769 |

## Total Solids by Method 2540 G-2011

| | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| Analyte | % | | | date / time | |
| Total Solids | 84.3 | | 1 | 04/11/2017 14:27 | WG969287 |

## Wet Chemistry by Method 9056A

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Chloride | 80.5 | | 11.9 | 1 | 04/11/2017 00:13 | WG968769 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 83.6 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 109 | | 12.0 | 1 | 04/10/2017 18:49 | WG968769 |

## Total Solids by Method 2540 G-2011

| | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| Analyte | % | | | date / time | |
| Total Solids | 85.1 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Chloride | 96.2 | | 11.7 | 1 | 04/10/2017 19:35 | WG968769 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 87.6 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 53.1 | | 11.4 | 1 | 04/11/2017 16:44 | WG969122 |

## Total Solids by Method 2540 G-2011

| | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| Analyte | % | | | date / time | |
| Total Solids | 87.2 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Chloride | 59.8 | | 11.5 | 1 | 04/11/2017 16:53 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 84.1 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 70.7 | | 11.9 | 1 | 04/11/2017 17:11 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 84.3 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 63.4 | | 11.9 | 1 | 04/11/2017 17:38 | WG969122 |

## Total Solids by Method 2540 G-2011

| | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| Analyte | % | | | date / time | |
| Total Solids | 85.1 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Chloride | 58.8 | | 11.7 | 1 | 04/11/2017 18:05 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 85.1 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 71.5 | | 11.8 | 1 | 04/11/2017 18:14 | WG969122 |

## Total Solids by Method 2540 G-2011

| | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| Analyte | % | | | date / time | |
| Total Solids | 88.4 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | | date / time | |
| Chloride | 54.0 | | 11.3 | 1 | 04/11/2017 18:23 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 87.4 | | 1 | 04/11/2017 14:13 | WG969288 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 56.0 | | 11.4 | 1 | 04/11/2017 18:32 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 87.8 | | 1 | 04/11/2017 13:48 | WG969289 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 52.7 | | 11.4 | 1 | 04/11/2017 18:41 | WG969122 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 87.2 | | 1 | 04/11/2017 13:48 | WG969289 |

## Wet Chemistry by Method 9056A

| Analyte | Result (dry) | Qualifier | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | | date / time | |
| Chloride | 56.6 | | 11.5 | 1 | 04/11/2017 18:50 | WG969122 |

WG969287

Total Solids by Method 2540 G-2011

# QUALITY CONTROL SUMMARY

L901241-01,02,03

## Method Blank (MB)

(MB) R3210133-1 04/11/17 14:27

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---|---|---|---|---|
| Analyte | % | | % | % |
| Total Solids | 0.000100 | | | |

## L901241-03 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-03 04/11/17 14:27 • (DUP) R3210133-3 04/11/17 14:27

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | % | % | | % | | % |
| Total Solids | 84.3 | 84.0 | 1 | 0.336 | | 5 |

## Laboratory Control Sample (LCS)

(LCS) R3210133-2 04/11/17 14:27

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| Analyte | % | % | % | % | |
| Total Solids | 50.0 | 50.0 | 100 | 85.0-115 | |

# QUALITY CONTROL SUMMARY

L901241-04,05,06,07,08,09,10,11,12,13

## Method Blank (MB)

(MB) R3210073-1 04/11/17 14:13

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---|---|---|---|---|
| Analyte | % | | % | % |
| Total Solids | 0.000400 | | | |

## L901241-04 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-04 04/11/17 14:13 • (DUP) R3210073-3 04/11/17 14:13

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | % | % | | % | | % |
| Total Solids | 83.6 | 83.4 | 1 | 0.255 | | 5 |

## Laboratory Control Sample (LCS)

(LCS) R3210073-2 04/11/17 14:13

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| Analyte | % | % | % | % | |
| Total Solids | 50.0 | 50.0 | 100 | 85.0-115 | |

WG969289

Total Solids by Method 2540 G-2011

# QUALITY CONTROL SUMMARY

L901241-14,15

## Method Blank (MB)

(MB) R3210067-1 04/11/17 13:48

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---|---|---|---|---|
| Analyte | % | | % | % |
| Total Solids | 0.00110 | | | |

## L901241-14 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-14 04/11/17 13:48 • (DUP) R3210067-3 04/11/17 13:48

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | % | % | | % | | % |
| Total Solids | 87.8 | 87.4 | 1 | 0.487 | | 5 |

## Laboratory Control Sample (LCS)

(LCS) R3210067-2 04/11/17 13:48

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|---|---|---|---|---|
| Analyte | % | % | % | % | |
| Total Solids | 50.0 | 50.0 | 100 | 85.0-115 | |

WG968769

Wet Chemistry by Method 9056A

# QUALITY CONTROL SUMMARY

L901241-01,02,03,04,05

## Method Blank (MB)

(MB) R3209754-4 04/10/17 17:16

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

## L901241-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-01 04/10/17 17:32 • (DUP) R3209754-5 04/10/17 17:47

| | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | | % | | % |
| Chloride | 58.6 | 62.1 | 1 | 6 | | 15 |

## L901241-03 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-03 04/11/17 00:13 • (DUP) R3209754-8 04/11/17 00:28

| | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | | % | | % |
| Chloride | 80.5 | 87.2 | 1 | 8 | | 15 |

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

(LCS) R3209754-2 04/10/17 16:15 • (LCSD) R3209754-3 04/10/17 16:30

| | 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 | 203 | 204 | 101 | 102 | 80-120 | | | 1 | 15 |

## L901241-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L901241-02 04/10/17 18:03 • (MS) R3209754-6 04/10/17 18:18 • (MSD) R3209754-7 04/10/17 18:34

| | Spike Amount (dry) | Original Result (dry) | MS Result (dry) | MSD Result (dry) | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | |
| Chloride | 562 | 359 | 981 | 979 | 111 | 110 | 1 | 80-120 | | |

# WG969122

Wet Chemistry by Method 9056A

# QUALITY CONTROL SUMMARY

L901241-06,07,08,09,10,11,12,13,14,15

## Method Blank (MB)

(MB) R3210065-2 04/11/17 12:12

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---|---|---|---|---|
| Analyte | mg/kg | | mg/kg | mg/kg |
| Chloride | 4.53 | J | 0.795 | 10.0 |

## L901241-07 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-07 04/11/17 16:53 • (DUP) R3210065-5 04/11/17 17:02

| | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | | % | | % |
| Chloride | 59.8 | 62.5 | 1 | 4 | | 15 |

## L901241-15 Original Sample (OS) • Duplicate (DUP)

(OS) L901241-15 04/11/17 18:50 • (DUP) R3210065-8 04/11/17 18:59

| | Original Result (dry) | DUP Result (dry) | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | | % | | % |
| Chloride | 56.6 | 54.2 | 1 | 4 | | 15 |

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

(LCS) R3210065-3 04/11/17 12:22 • (LCSD) R3210065-4 04/11/17 12:31

| | 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 | % | % | % | | | % | % |
| Chloride | 200 | 198 | 202 | 99 | 101 | 80-120 | | | 2 | 15 |

## L901241-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L901241-08 04/11/17 17:11 • (MS) R3210065-6 04/11/17 17:20 • (MSD) R3210065-7 04/11/17 17:29

| | Spike Amount (dry) | Original Result (dry) | MS Result (dry) | MSD Result (dry) | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | mg/kg | mg/kg | mg/kg | mg/kg | % | % | | % | | |
| Chloride | 594 | 70.7 | 670 | 675 | 101 | 102 | 1 | 80-120 | | |

## Abbreviations and Definitions

| | |
|---|---|
| SDG | Sample Delivery Group. |
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| 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. |
| Rec. | Recovery. |

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

# 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 |
| 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 |
| 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 [1] | 90010 | South Dakota | n/a |
| Kentucky [2] | 16 | Tennessee [14] | 2006 |
| Louisiana | AI30792 | 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 |
| Missouri | 340 | Wisconsin | 9980939910 |
| Montana | CERT0086 | Wyoming | A2LA |
| Nebraska | NE-OS-15-05 | | |

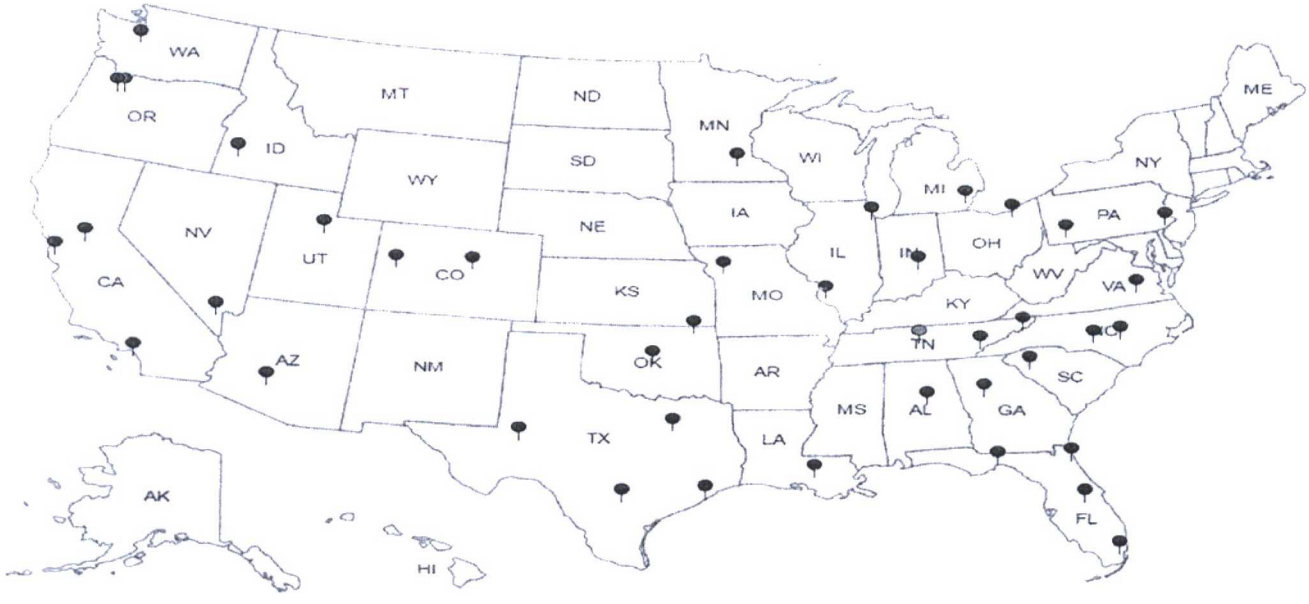
## Third Party & Federal Accreditations

| | | | |
|---|---|---|---|
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC | 100789 |
| A2LA – ISO 17025 [5] | 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 [14] 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:

XTO ENERGY
Western Division

| | | |
|---|---|---|
| Quote Number | | Page ___ of ___ |
| XTO Contact: Kurt | | XTO Contact Phone #: 505-486-9543 |
| Email Results to: James, Kurt, Logan | | |
| Well Site/Location: Salty Dog SWD #4 | API Number: 30-045-32334 | Saturday Delivery (Y / (N)) |
| Collected By: Kurt | Samples on Ice: (Y) N | Turnaround: X Standard; ___ Next Day; ___ Two Day; ___ Three Day; ___ Same Day; Date Needed ___ |
| Company: XTO | Test Reason: Spill | |
| Signature: Kurt Hamilton | Gray Areas for Lab Use Only! | |

| Sample ID | Sample Name | Media | Date | Time | Preservative | No. of Conts. | Chloride | Analysis/Cont |
|---|---|---|---|---|---|---|---|---|
| Salty Dog #4 | Culvert Disch | S | 4/6 | 9:20 | on ice | (1) 4oz Jar | X | |
| | Culvert 100' | | | 9:22 | | | X | |
| | Culvert 200' | | | 9:24 | | | X | |
| | Culvert 300' | | | 9:25 | | | X | |
| | Beg of Wash | | | 9:27 | | | X | |
| | Wash 100' | | | 9:30 | | | X | |
| | Wash 200' | | | 9:33 | | | X | |
| | Wash 300' | | | 9:35 | | | X | |
| | Wash 400' | | | 9:38 | | | X | |
| | Wash 500' | | | 9:40 | | | X | |
| | Wash 600' | | | 9:45 | | | X | |
| | Wash 800' | | | 9:47 | | | X | |
| | Wash* 900' | | | 9:50 | | | X | |

Media: Filter = F Soil = S Wastewater = WW Groundwater = GW Drinking Water = DW Sludge = SG Surface Water = SW Air = A Drill Mu

| | | | |
|---|---|---|---|
| Relinquished By: (Signature) Kurt Hamilton | Date: 4-6-17 | Time: 2:30 | Received By: (Signature) |
| Relinquished By: (Signature) | Date: | Time: | |
| Relinquished By: (Signature) | Date: | Time: | Received for Lab by: (Signature) |

Comments
TRK # 6127 6739 4104

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

XTO ENERGY
Western Division

| | | |
|---|---|---|
| Quote Number | Page ___ of ___ | Analysis/Cont |
| XTO Contact: KURT | XTO Contact Phone #: 505-486-9543 | |
| Email Results to: JAMES, KURT LOGAN | | |
| Well Site/Location: SALTY DOG SWD #4 | API Number: 30-045-32334 | Saturday Delivery (Y / (N)) |
| Collected By: KURT | Samples on Ice: (Y) N | Turnaround: X Standard; ___ Next Day; ___ Two Day; ___ Three Day; ___ Same Day; Date Needed ___ |
| Company: XTO | Test Reason: SPILL | |
| Signature: Kurt Hoekstra | Gray Areas for Lab Use Only! | |

| Sample ID | Sample Name | Media | Date | Time | Preservative | No. of Conts. | CHLORIDE |
|---|---|---|---|---|---|---|---|
| SALTY DOG #4 | WASH 1000 | S | 4-6 | 9:52 | ON ICE | (1) 4oz Jar | X |
| | END OF SPILL | S | 4-6 | 9:55 | | | X |

Media : Filter = F Soil = S Wastewater = WW Groundwater = GW Drinking Water = DW Sludge = SG Surface Water = SW Air = A Drill Mud

| | | | |
|---|---|---|---|
| Relinquished By: (Signature) Kurt Hoekstra | Date: 4-6-17 | Time: 2:30 | Received By: (Signature) |
| Relinquished By: (Signature) | Date: | Time: | |
| Relinquished By: (Signature) | Date: | Time: | Received for Lab by: (Signature) |

Comments

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

# ESC LAB SCIENCES
## Cooler Receipt Form

| | |
|---|---|
| Client: XTORNM | SDG# 19 |
| Cooler Received/Opened On: 4/7/17 | Temperature: 2.4 |
| Received By: Timiesha Scott | |
| Signature: | |

| Receipt Check List | NP | Yes |
|---|---|---|
| COC Seal Present / Intact? | | |
| COC Signed / Accurate? | | |
| Bottles arrive intact? | | |
| Correct bottles used? | | |
| Sufficient volume sent? | | |
| If Applicable | | |
| VOA Zero headspace? | | |
| Preservation Correct / Checked? | | |