# NOVEMBER 05, 2019



# RELEASE CLOSURE REPORT

XTO ENERGY, Inc. – New Mexico C State NCT-2 #010 (API: 30-025-32691)

1RP-5027

Prepared for: XTO Energy, Inc.

Prepared by: Sport Environmental Services, LLC

502 N. Big Spring St.

Midland, TX 79701

www.sportenv.com



November 05, 2019

Environmental Specialist Team New Mexico Oil Conservation Division District 1 (Hobbs) 1625 N. French Dr. Hobbs, NM 882140

Re: Release Closure Report

XTO Energy, Inc.

New Mexico C State NCT-2 #010

RP #: 1RP-5027

Approximate Geographic Coordinates: 32.560940°N, -103.284378°W

Unit Letter H (SE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub>) of Section 19, Township 20S, Range 37E

Lea County, New Mexico

### Dear NMOCD Environmental Specialists:

This documentation is being provided as part of XTO Energy, Inc. (XTO or Client) efforts to address historical releases that may have been addressed in the past, but which appear not to have documentation from the New Mexico Oil Conservation Division (NMOCD) clearly demonstrating approved closure of the release. The release referenced above was included in the list of historical releases which occurred prior to August 14, 2018 that are intended to be addressed as described within the "Compliance Agreement for Remediation for Historical Releases" (Compliance Agreement) entered into by NMOCD and XTO on November 8, 2018.

Sport Environmental Services, LLC (Sport Environmental) has prepared, on behalf of XTO, a Release Closure Report for the New Mexico C State NCT-2 #010 (subject site).

### Background and Site History

On December 7, 2004, a release occurred when the major head switch on the oil storage tank malfunctioned resulting in a release of approximately twenty-eight (28) barrels of crude oil onto the compacted caliche pad of the active well and the tank battery pad and an area south of the pad. Approximately twenty-five (25) barrels of crude oil were recovered and returned to the storage tanks. The control switch was replaced, and the battery was placed back into service.

The Initial C-141 Form associated with this release indicates that the release occurred on December 7, 2004 and that it was discovered at approximately 4:30 pm. The release was promptly addressed and Environmental Plus, Inc. (EPI), a third-party environmental consultant based out of Eunice, New Mexico was hired to address the release.

Since several years have elapsed since EPI submitted documentation to NMOCD regarding the soil sampling and cleanup work performed at the subject site, XTO requested that Sport Environmental review the data associated with this subject site and follow-up on EPI's remedial efforts associated with requesting closure of this release.

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This request for closure is based on a review of the NMOCD's Environmental and Administrative Records Database, historical and contemporary aerial imagery, as well as clean-up documentation from EPI's "Final C-141 and closure documentation" report dated March 11, 2005, all of which indicated that the release had been properly addressed in the past. Given that EPI's original work plan was approved by NMOCD and that aerial imagery shows excavation activity at the release location as well as the lands subsequent revegetation, it would appear that EPI's approved remedial activities were successful.

The original "Final C-141 and closure documentation" issued by EPI documents evidence of proper release remedy. The entire original document produced by EPI is available in **Attachment A**. As will be detailed within this report, the additional delineation and confirmation sampling requested by NMOCD was performed by Sport Environmental – this additional data provides further confirmation that the subject site has been successfully remediated.

### Site Assessment, Characterization, and Groundwater Depth Determination

On December 20, 2017, James McDaniel, EH&S Supervisor with XTO, hand-delivered a copy of the aforementioned SESI final report to the NMOCD District 1 Office to ensure the agency had received the submittal. On April 26, 2018, Ms. Olivia Yu, NMOCD Environmental Specialist, denied XTO's request for closure and stated that the "Final C-141" would not be accepted due to insufficient release characterization (please see **Attachment B** for a detailed list of further release characterization requests outlined within an email from Olivia Yu to James McDaniel).

In 2018, following the NMOCD's request for further release characterization XTO hired Sport Environmental Services, LLC (*Sport Environmental*) to perform further soil sampling activities to characterize the release. Sport Environmental's efforts to provide improved site characterization data included additional delineation of the release area as shown in the Site Plan and Soil Sampling Diagram (**Attachment C**), discrete depth soil sampling with a Geoprobe 540UD to greater depths than were originally achieved by SESI in 2005, and submission of all soil samples to a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory for analysis of Chloride, BTEX, and TPH concentrations. The results of this sampling will be compared to the closure criteria concentrations as described below.

As part of assessment and characterization of the subject site by Sport, aerial imagery was evaluated for the presence of major watercourses within a 0.5-mile radius of the release site. Aerial imagery demonstrating the absence of such watercourses within a 0.5-mile radius of the release site can be found within **Attachment D**.

A groundwater depth evaluation was performed as well. The relevant New Mexico Office of the State Engineer (NMOSE) and GIS query tools were reviewed for groundwater depth information. A 0.5-mile query was performed using the NMOSE Water Rights Reporting System, and it revealed three (3) wells drilled between 1953 and 1972 located within 0.5-mile of the subject site with a consistent depth to water of 35 feet. Please see **Attachment E** for the results of the NMOSE query which have established groundwater depth at the site to be approximately 35 feet below ground surface ('bgs). Therefore, based on the remediation standards outlined in §19.15.29 NMAC Table 1, the following are the applicable constituent concentration limits for the release at the subject site:

Table 1: Site Closure Criteria (Adapted from NMOCD Table 1(NMAC 19.15.29.11))

Closure Criteria for Soils Impacted by a Release: Minimum depth believes to groundwater is less than 50 feet	ow any point within the horizontal boundary of the
Constituent	Limit (mg/Kg)
Chloride	600
TPH (Total Petroleum Hydrocarbons)	100
(GRO+DRO+MRO)	
BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes)	50
Benzene	10

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### Analytical Results Summary

Sport Environmental performed the additional delineation soil sampling at the subject site on October 22, 2018 with a Geoprobe 540UD (operated by Sport Environmental), on June 26, 2019 with an air-rotary drilling rig (operated by Harrison and Cooper, Inc.), and on October 16, 2019 with an excavator (operated by Production Management, Inc.). During the sampling events, samples were collected in accordance with proper sampling protocols to ensure representative characterization of soils submitted to TestAmerica or Xenco Laboratories, both of which are NELAP certified laboratories, under proper chain-of-custody for analysis. Each constituent was analyzed using appropriate analytical methods. Chlorides were analyzed using EPA Method 300, BTEX constituents were analyzed using Method 8260B, and TPH was analyzed using Method 8015B. The analytical results, associated with the October 22, 2018 sampling event, demonstrated concentrations of all constituents were below their respective regulatory limits with the exception of TPH at the surface (0-1'bgs interval) and at the 5'bgs depth interval on the Caliche Pad (CP). Given that the site is an active tank battery, these slightly elevated concentrations of TPH are likely unrelated to the subject release. A table summarizing the analytical results associated with the October delineation and confirmation sampling event is provided in the table on the following page for reference.

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Table 2: October 22, 2018 Soil Sampling Summary

Analyte	Benzene	Toluene	BTEX Ethylbenzene	Xylenes, Total	Gasoline Range Organies [C6 - C10	etroleum Hydrocarbo		Chloride Chloride
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Closure Criteria for Soils Impacted by a Release where the Depth to Groundwater is Less than 50 feet	10		I BTEX Limit is 50	mg/Kg	Total 1	PH Limit is 100	mg/Kg	600
490-161842-1 NCT-CP-CS1-001 (0-1' bgs) (CP = Caliche Pad) 10/22/2018	ND	ND	ND	ND	ND	96.4	175	NS
12:35 PM 490-161842-2 NCT-CP-CS2-001 (1'-2' bgs) 10/22/2018	ND	ND	ND	ND	ND	5.80	ND	NS
12:35 PM 490-161842-3 NCT-CP-CS3-001 (5' bgs) 10/22/2018	ND	ND	ND	ND	ND	124	180	NS
12:50 PM NCT-IC-CS1-001 (2'-3' bgs) (IC = Inside Containment) 10/22/2018	ND	ND	ND	ND	ND	14.2	11.0	NS
10/22/018 1:15 PM 490-176570-1 BG-001 @ 0-1'bgs	25.000	27223	53557	1	10000	20000	5-0.04460	39728
6/26/2019 10:14 AM 490-176570-2	ND	ND	ND	ND	ND	3.6	ND	ND
BG-001 @ 5'bgs 6/26/2019 10:18 AM 490-176570-3	ND	ND	ND	ND	ND	3.1	ND	ND
BG-001 @ 10°bgs 6/26/2019 10:19 AM	ND	ND	ND	ND	ND	2.92	ND	22.8
490-176570-4 BG-001 @ 15'bgs 6726/2019 10:20 AM	ND	ND	ND	ND	ND	2.99	ND	78.6
490-176570-5 BG-001 @ 20'bgs 6/26/2019 10:21 AM	ND	ND	ND	ND	ND	2.81	ND	11.7
490-176570-6 SB1-002 @ 0-1'bgs 6726/2019 10:34 AM	ND	ND	ND	ND	ND	ND	ND	ND
490-176570-7 SB1-002 @ 5'bgs 6726/2019 10:35 AM	ND	ND	ND	ND	ND	2.82	ND	12.0
490-176570-8 SB1-002 @ 10°bgs 6726/2019 10:36 AM	ND	ND	ND	ND	ND	ND	ND	ND
490-176570-9 SB1-002 @ 15°bgs 6726/2019 10:37 AM	ND	ND	ND	ND	ND	3.27	2.71	ND
490-176570-10 SB1-002 @ 20°bgs 6/26/2019 10:38 AM	ND	ND	ND	ND	ND	ND	ND	ND
490-176570-11 SB2-001 @ 0-1'bgs 6726/2019 10:42 AM	ND	ND	ND	ND	ND	5.10	ND	ND
490-176570-12 SB2-001 @ 5'bgs 6726/2019 10:43 AM	ND	ND	ND	ND	ND	10.2	5.27	ND
490-176570-13 SB2-001 @ 10°bgs 6726/2019 10:44 AM	ND	ND	ND	ND	ND	ND	ND	ND
10:47 AM 582-001 @ 15'bgs 6/26/2019 10:45 AM	ND	ND	ND	ND	ND	ND	ND	ND
107-5 AM 190-176570-15 SB2-001 @ 20°bgs 6/26/2019 10:46 AM	ND	ND	ND	ND	ND	ND	ND	ND
490-176570-16 SB3-001 @ 0-1'bgs 6/26/2019	ND	0.00102	ND	ND	ND	17.6	5.70	ND
10:50 AM 490-176570-17 5B3-001 @ 5'bgs 6/26/2019	ND	ND	ND	ND	ND	3.21	ND	ND
10:51 AM 490-176570-18 8B3-001 @ 10°bgs 6/26/2019 10:52 AM	ND	ND	ND	ND	ND	2.76	ND	ND
490-176570-19 SB3-001 @ 15'bgs 6/26/2019	ND	ND	ND	ND	ND	3.09	ND	7.09
10:53 AM 490-176570-20 583-001 @ 20'bgs 6/26/2019 10:54 AM	ND	ND	ND	ND	ND	ND	ND	ND

NS = Not Sampled ND = Non-Detect

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To be especially protective, the affected soil at the surface and at a depth of 5-6'bgs was removed from the subject site. This soil was hauled to an approved disposal facility (please see **Attachment F** for a copy of the relevant waste manifests) and replaced with fresh caliche. On October 16, 2019, prior to backfilling the surface with the fresh caliche, additional soil samples were taken from the walls and floor of the area that had been affected by TPH. The North Wall (NW), South Wall (SW), East Wall (EW), West Wall (WW), and Excavation Floor (EF) of the point where elevated TPH concentrations were observed were subject to confirmation sampling. Results from this soil sampling event confirmed that the site now meets the appropriate remediation standards for all relevant COCs including TPH. Please see the table below for a summary of results from the October 16, 2019 sampling event.

Table 3: October 16, 2019 Soil Sampling Summary

		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Gasoline Range Hydrocarbons	Diesel Range Organics	Oil Range Hydrocarbons	Total TPH	Chloride
Sample ID	Sample Date & Time	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NCT-CP- NW @ 0-1'BGS	10/16/19/ 11:10	<0.000208 U	<0.00100 U	<0.000337 U	<0.000438 U	<0.000208 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	3.94 J
NCT-CP- NW @ 5-6 'BGS	10/16/19/ 11:32	<0.000205 U	<0.000990 U	<0.000332 U	<0.000432 U	<0.000205 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	26.0
NCT-CP- EF @ 6'BGS	10/16/19/ 11:35	<0.000207 U	<0.00100 U	<0.000336 U	<0.000438 U	<0.000207 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	34.1
NCT-CP- WW @ 0-1'BGS	10/16/19/ 11:09	<0.000207 U	<0.00100 U	<0.000336 U	<0.000437 U	<0.000207 U	<14.9 U	<14.9 U	<14.9 U	<14.9 U	4.09 J
NCT-CP- WW @ 5-6' BGS	10/16/19/ 11:31	<0.000207 U	<0.00100 U	<0.000336 U	<0.000438 U	<0.000207 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	42.1
NCT-CP- SW @ 0-1'BGS	10/16/19/ 11:07	<0.000208 U	<0.00100 U	<0.000337 U	<0.000438 U	<0.000208 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	2.14 J
NCT-CP- SW @ 5-6'BGS	10/16/19/ 11:33	<0.000207 U	<0.000998 U	<0.000335 U	<0.000436 U	<0.000207 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	29.8
NCT-CP- EW @ 0-1'BGS	10/16/19/ 11:08	<0.000208 U	<0.00100 U	<0.000337 U	<0.000438 U	<0.000208 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	1.33 J
NCT-CP- EW @ 5-6'BGS	10/16/19/ 11:30	<0.000205 U	<0.000990 U	<0.000332 U	<0.000432 U	<0.000205 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	21.0

The full analytical results, including chain-of-custody information, from all sampling events are available in **Attachment G**.

When the latest results associated with Sport Environmental's soil sampling are added to the results from initial sampling performed, the analytical results demonstrate that the cleanup efforts at the subject site have been successful and that concentrations of all constituents are below their respective closure criteria limits.

### Observations of the Subject Site

When Sport Environmental was present on location at the subject site, it appeared that the natural grade of the land, and vegetation were similar to the surrounding areas that would not have been affected by the release. The original C-141 that was submitted to NMOCD indicates that the release affected the well pad and a pasture area to the south. Aerial imagery shows that earthworks at this pasture area took place promptly following the release and that these efforts were successful in restoring the subject site to its pre-release condition. The most recent aerial imagery confirms that in the time since EPI's remedial work took place that the vegetation near the subject site has remained consistent throughout the years or improved with time. The most recent images available indicate that the surface topography and vegetation are similar to that of the surrounding area. In addition, during Sport Environmental's site visits and rounds of confirmation sampling, the caliche well pad where the release occurred in 2005, was observed to be in good condition and does not show evidence of this or other releases.



Figure 1. Georeferenced Google Earth Image Depicting Caliche Well Pad Associated with the Subject Site and the Pasture Area to the South/Southwest. The pasture to the south of the caliche well pad has been disturbed and is free of vegetation indicating that earthworks and other efforts to remediate the affected area took place shortly after the March 2005 release. This observation supports the work plan that was described in EPI's original closure request documentation.



Figure 2. Georeferenced Google Earth Image Depicting Caliche Well Pad Associated with the Subject Site. This is the most current aerial image of the subject site that is available at the time of report preparation. The image is from November of 2017 and shows that the caliche pad is in good condition. Site visits performed by Sport Environmental in 2018 and 2019 confirm that the subject site is consistently well-operated and maintained. Vegetation has been restored in the area south of the caliche well pad and observations of the site confirm that the topography of the previously affected area has also been restored to its original grade to prevent erosion of soil or ponding of water.

As shown in Figure 1, Figure 2, and in the photographic log that follows, the subject site appears to have undergone the remedial activities described in EPI's closure documentation. The work that was performed has contributed to the subject site continuing to be a well-maintained and release-free well pad.

### Geo-tagged Site Photographs

Photographs showing the release location and soil sampling activities are provided in the photographic log below. When possible, the photographs were geotagged to contain the geographic coordinates, date, time, and other data associated with their capture.

### Photographic Log



XTO Energy, Inc. – New Mexico C State NCT-2 #010 (1RP-5027)



A return trip to the subject site took place as part of confirmation sampling efforts. No visual or olfactory indications of contamination were present; however, one location did exceed the 100-ppm TPH limit. That affected area was remediated by hauling off the TPH-affected soil and replacing it with fresh caliche.

The photograph shows that vegetation is present at the subject site and that the topography matches the surrounding area.

In addition to the photographs provided above, field notes from Harrison Cooper, Inc., the drilling company that was subcontracted to assist with delineation efforts at the subject site, are available in **Attachment H** and include the boring logs associated with this work.

### Request for Release Closure - Confirmation Analyses Demonstrates Subject Site is Remediated

Given the data provided in EPI's Final C-141 and closure documentation report dated March 11, 2005, a review of aerial imagery, several rounds of confirmation soil sampling performed by Sport Environmental Services, and the replacement of TPH-affected soil with fresh caliche on a portion of the well pad, this report confirms that the subject site has been restored to its pre-release conditions.

Based on the laboratory analytical results and the assessment data referenced herein Sport Environmental respectfully requests closure status for XTO Energy, Inc.'s New Mexico C State NCT-2 #010 release which has been assigned the NMOCD order number 1RP-5027. A copy of the NMOCD's new Form C-141 is available in **Attachment I** to accompany this updated request for closure.

If NMOCD have any further questions or comments regarding this request for closure, please contact us at (432) 683-1100.

Sincerely,

I phrought S. Moore.

Deborah S. Moore, ME, REPA, CESCO, RSO President/Environmental Engineer Sport Environmental Services, LLC

cc: Mr. Shelby Pennington (XTO Energy, Inc.)

### List of Attachments:

- A EPI Final C-141 and Closure Documentation (March 2005)
- B NMOCD Email Correspondence Requesting Further Soil Sampling Copy (sent by NMOCD April of 2018)
- C Site Plan and Soil Sampling Diagram
- D 0.5-Mile Radius Map Denoting Absence of Major Watercourses
- E Groundwater Depth Data
- F Waste Manifests
- G Analytical Reports and Chain-of-Custody Forms
- H Soil Boring Log
- I New Final Form C-141 (dated November 5, 2019)

## Attachment A

EPI Final C-141 and Closure Documentation Report dated March 11, 2005

# ENVIRONMENTAL PLUS, INC. STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

March 11, 2005

Mr. Paul Sheeley **Environmental Engineer** New Mexico Oil Conservation Division 1625 North French Hobbs, New Mexico 88240

Re: XTO Energy Inc.New Mexico State C NCT2 #10 Final C-141 and closure documentation

UL H (SE¼ of the NE¼) of Section 19, T20S, R37E

Latitude: 32°33'39.391"N and Longitude: 103°17'03.887"W

Landowner: State of New Mexico

Driving Directions: From the intersection of NMSR 8 and NMSR 322 in Monument, NM, go south on NMSR 8 for 6.4 miles. Then right on Maddox Road 4 miles, then right 1.0 miles, then

right 0.15 miles, then right 0.15 miles to the NM State C NCT2 #10 work location.

Dear Mr. Sheeley:

Environmental Plus, Inc. (EPI), on behalf of Guy Haykus, XTO Energy Inc., submits the attached New Mexico Oil Conservation Division (NMOCD) final form C-141 for the above-referenced leak site located on land owned by the State of New Mexico, approximately 3.6 miles southwest of Monument, New Mexico. The attached site information and metrics form ranks the site in accordance with the "NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)." The impacted soil is exempt from EPA RCRA 40 CFR Part 261

### **NMOCD Site Rank and Remedial Goals**

The New Mexico Office of the State Engineer information indicates an average depth to groundwater at the site of 35-feet below ground surface ('bgs) and identifies 2 agricultural water wells located within a 1,000-foot radius of the site. There were no surface water bodies observed to be within a 1,000-foot radius of the site. These characteristics result in a site ranking score of 40 points that applies the following remedial goals for the constituents of concern (CoCs):

Received by OCD: 4/15/2020 4:22:24 PM

CONSTITUENTS OF CONCERN/CONTAMINANTS	REMEDIAL GOAL
Benzene	10 mg/Kg*
BTEX (mass sum of benzene, toluene, ethylbenzene, and xylenes	50 mg/Kg
Total Petroleum Hydrocarbon 8015m (TPH <sup>8015m</sup> )	100 mg/Kg
Chloride residuals must not be capable of impacting local water resources abo	ve the New Mexico Water
Quality Control Commission (WQCC) water quality standard of 250 mg/Liter.	
*mg/Kg = milligrams per kilogram; which is equivalent to parts per million (ppm).	

### Occurrence and Mitigation

The release occurred when the major head switch on the oil storage tank malfunctioned resulting in a release of approximately 28 barrels of crude oil onto the compacted caliche pad of the active well and tank battery pad and an area south of the pad. Approximately 25 barrels of crude oil were recovered and returned to the storage tank. The control switch was replaced and the battery placed back into service. The total release area covered approximately 7,260 square feet of surface area (140' x 100'). Photographs and maps are attached for reference.

### Delineation and Remediation and Follow-up

XTO Energy Inc. delineated the vertical and horizontal extents of CoC impact during excavation of the release. Approximately 1-foot of the visibly impacted portion of the caliche pad north of the battery was removed and replaced with clean caliche. All excavated soil was initially stockpiled on plastic north of the wellpad prior to disposal off-site. Analytical results from the December 10, 2004 sampling of the sides and bottom of the excavation indicated the sidewalls were less than the NMOCD CoC remedial goals, the bottom TPH<sup>8015m</sup> remained slightly elevated at 1,362 mg/Kg. An additional foot of soil was removed from the bottom of the excavation and resampled on December 15, 2004 and analyzed for TPH8015m and the BTEX compounds. The analytical results were non-detectable (ND) and considered acceptable (reference the attached analytical result summary and illustrations and laboratory reports). The excavation was subsequently backfilled with local clean soil and contoured to the natural grade. A total of 908 cubic yards of soil impacted above the NMOCD CoC remedial goals was excavated and disposed of in the Environmental Plus, Inc. Landfarm #NM-01-0013. The site will be reseeded in the Spring of 2005.

### **Closure Request**

Received by OCD: 4/15/2020 4:22:24 PM

EPI, on behalf of XTO Energy, Inc., requests that the NMOCD consider the information provided in this letter report and require "no further action" at the site.

If there are any questions or more information is needed, please call Mr. Cody Miller or myself at the office or at 505.631,8447 and 505.390.7864, respectively or Mr. Guy Haykus at 505.394.2089. All official communication should be addressed to:

> Mr. Guy Haykus XTO Energy Inc. P.O. Box 700 Eunice, New Mexico 88231 505.394.2089

Sincerely.

Pat McCasland

**EPI Technical Services Manager** enviplus l@aol.com

cc:

Guy Haykus, XTO Energy Inc. (William\_Haykus@XTOEnergy.com)

Dudley McMinn, XTO Energy, Inc. (Dudley\_McMinn@XTOEnergy.com)

file

**Enclosures:** 

Site Information and Metrics Form

Final NMOCD form C-141

Annotated Topographical Map

Site Map

New Mexico Office of the State Engineer Water Well Report

**Photographs** 

**Analytical Results Summary** 

**Laboratory Reports** 





Site Information and

Incident Date: 12/7/2004

NMOCD Notified:

12-8-04 @ 9:20 AM Metrics SITE: New Mexico State-C NCT2 #10 Assigned Site Reference #: Company: XTO Energy Inc. Street Address: Mailing Address: 200 N. Loraine Suite 800 City, State, Zip: Midland, Texas 79701 Representative: Guy Haykus 505.394.2089 Representative Telephone: Telephone: Fluid volume released (bbls): 28 bbls Recovered (bbls): 25 bbls >25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas) 5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas) Leak, Spill, or Pit (LSP) Name: NM State C NCT2 #10 Source of contamination: Crude Oil Storage Tank Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico LSP Dimensions 140' x 100' LSP Area:  $7,260 \text{ sqft } \text{ft}^2$ Location of Reference Point (RP) Location distance and direction from RP Latitude: 32°33'39.391"N Longitude: 103°17'03.887"W Elevation above mean sea level: ~3,527 'amsl (interpolated from the USGS topographical map) Feet from South Section Line Feet from West Section Line Location- Unit or 1/4/4: SE1/4 of the NE1/4 Unit Letter: H Location- Section: 19 Location- Township: T20S Location- Range: R37E Surface water body within 1000 'radius of site: none Domestic water wells within 1000' radius of site: none Domestic water wells within 1000' radius of site: Agricultural water wells within 1000' radius of site: 2 Agricultural water wells within 1000' radius of site: Public water supply wells within 1000' radius of site: none Depth from land surface to ground water (DG) 35'bgs Depth of contamination (DC) -5'bgs Depth to ground water (DG - DC = DtGW) - 30-feet 1. Ground Water 2. Wellhead Protection Area 3. Distance to Surface Water Body If Depth to GW <50 feet: 20 points If <1000' from water source, or;<200' from <200 horizontal feet: 20 points If Depth to GW 50 to 99 feet: 10 points private domestic water source: 20 points 200-100 horizontal feet: 10 points If >1000' from water source, or; >200' from If Depth to GW >100 feet: 0 points >1000 horizontal feet: 0 points private domestic water source: 0 points Ground water Score = Surface Water Score= 0 Wellhead Protection Area Score= 20 Site Rank (1+2+3) = 40

	Total Site Ra	nking Score and Acceptable Concentrati	ons
Parameter	>19	10-19	0-9
Benzene	10 ppm	10 ppm	IO ppm
BTEX1	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
100 ppm field	VOC headspace measurement r	nay be substituted for lab analysis	

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District III

1301 W. Grand Avenue, 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

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

Form C-141

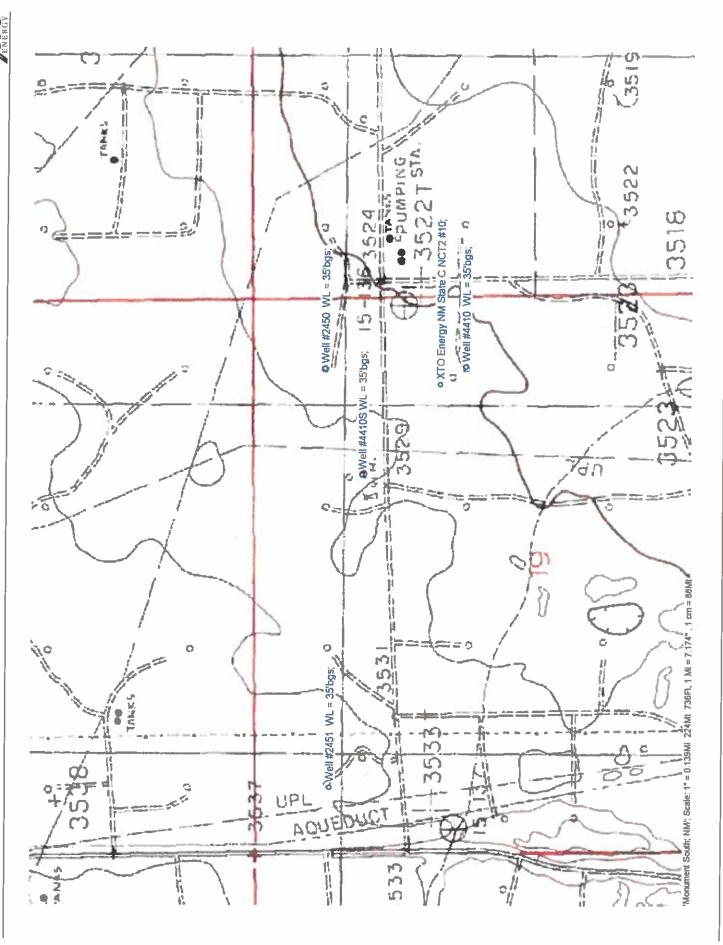
Revised March 17, 1999

side of form

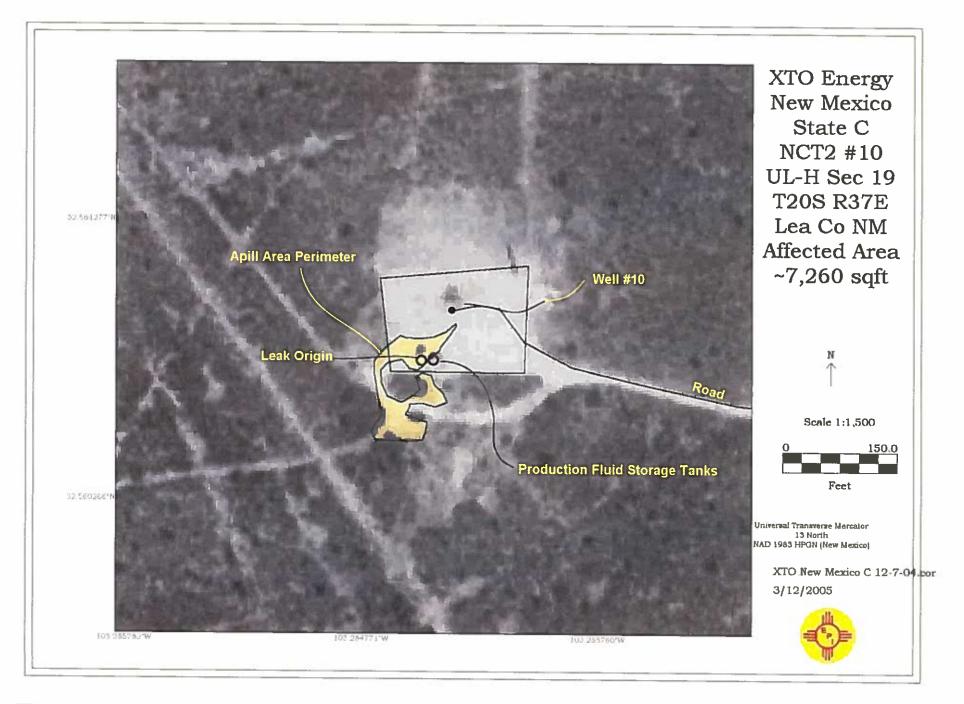
Release Notification	and Corrective Ac	tion				
OPERATOR	☐ Initia	al Report 🛛 🗵	Final Report			
Name of Company	Contact	•				
XTO Energy Inc. Address	Guy Haykus Telephone No.					
200 N. Loraine Suite 800 Midland, Texas 79701	505.394.2089					
Facility Name	Facility Type					
NM State C NCT2 #10	Crude Oil Storage Ta	nk				
Surface OwnerState of New Mexico	Minoral O		) h =			
Surface OwnerState of New Mexico *CCA	Mineral Owner C	StateLease	NSO-025-32691			
	OF RELEASE					
Unit Letter Section Township Range Feet from the Nort  H 19 T20S R37E	/South Line   Feet from the   E	last/West Line	County: Lea			
Latitude:32°33'39.391"N	Longitude: 103°	17'03.887"W				
	OF RELEASE					
Type of Release Crude Oil	Volume of Release	Volume R				
Source of Release	28 bbls barrels Date and Hour of Occurrence	e Date and	Hour of Discovery			
Crude Oil Storage Tank	12/7/2004 @ ?		<b>2 4:30 PM</b>			
Was Immediate Notice Given?  ✓ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley (Donna Mull)					
By Whom?	Date and Hour	·				
Janice Courtney 12-8-04 @ 9:20 AM						
Was a Watercourse Reached?  Yes No  If YES, Volume Impacting the Watercourse.						
If a Watercourse was Impacted, Describe Fully.* NA						
Describe Cause of Problem and Remedial Action Taken.*						
Crude Oil Storage Tank Head switch failed and crude oil storage tank	overflowed.					
Describe Area Affected and Cleanup Action Taken.*  A total of 908 cubic yards of soil impacted above the NMOCD CoC reme.  Landfarm #NM-01-0013. Remedial Goals achieved: TPH 8015m = 100 m  Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.	ng/Kg, Benzene = 10 mg/Kg, an	ıd BTEX, i.e., the ma	iss sum of Benzene,			
I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate health or the environment. In addition, NMOCD acceptance of a C-141 reported to the federal, state, or local laws and/or regulations.	tifications and perform corrective NMOCD marked as "Final Rep contamination that pose a threa	ve actions for releases ort" does not relieve t to ground water, sur	s which may endanger the operator of liability face water, human			
Signature: SoM Calay Ett for & Hayler	OIL CONS	ERVATION D	IVISION			
Printed Name: Guy Haykus (e-mail: William_Haykus@XTOEnergy.com)	Approved by District Supe	rvisor:	j			
Title: Supervisor	Approval Date:	Expiration	n Date:			
Date: 12/14/2004 Phone: 505.394.2089	Conditions of Approval:		Attached			
* Attach Additional Sheets If Necessary	1RP-5027		1			
	INF-304/					

nPRS0511555617

Received by OCD: 4/15/2020 4:22:24 PM









New Mexico Office of the State Engineer

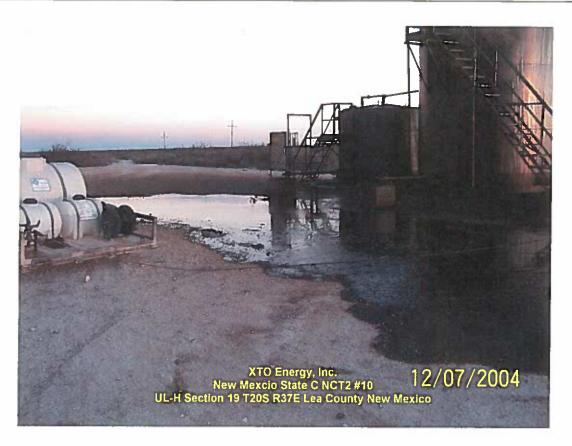
Page 1 of 1

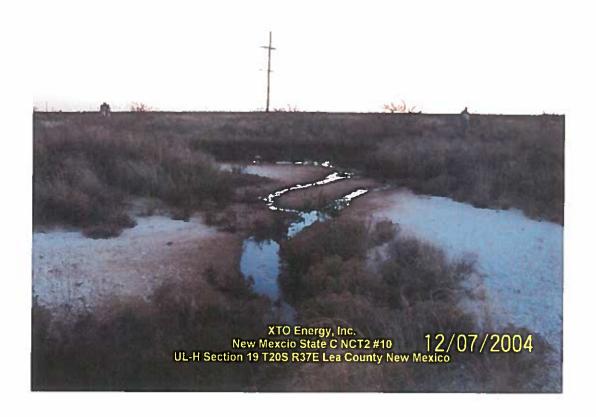
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Well	/ Surface Data Repo	rt Avg Dep	th to Water Report
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VERAGE DEI	W	WATERS Menu PORT 12/14/2004	th Water in Feet)
_	D27 X:	Overship: 20s Range: 37E  Output  Page: 37E  Y: Basin:	D27 X: Y: Zone: Num  Basin: Num  C: (First) (Last)

http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher

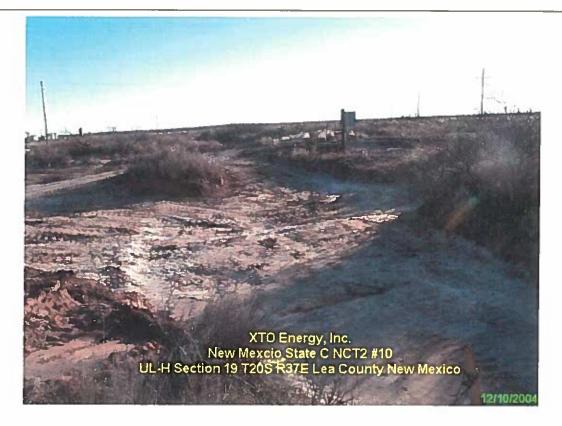
12/14/2004

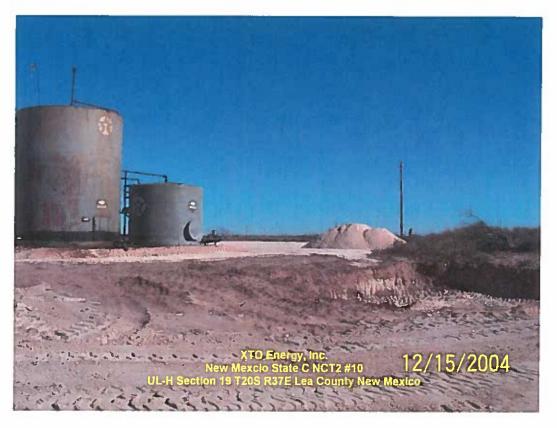


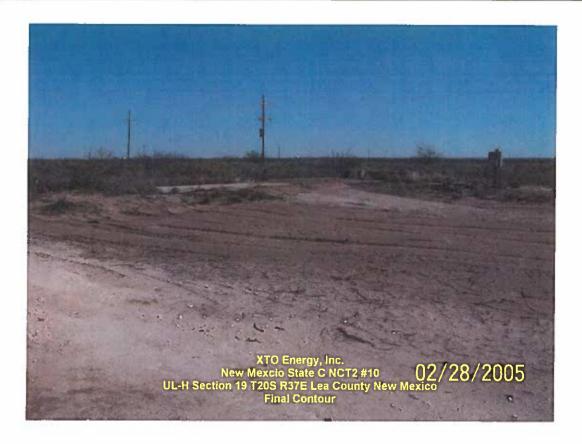


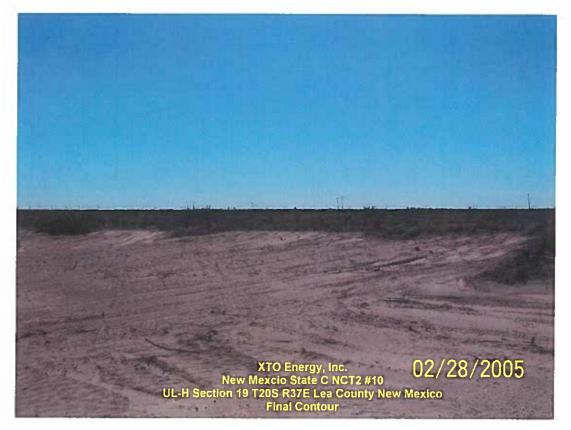












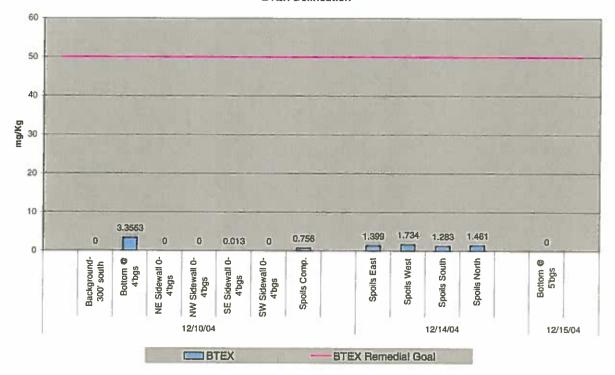


					×	XTO Energy, Inc.	gy, Inc.								
					New Me	New Mexico State C NCT 2 #10	e C NCT	2 #10							
					Excav	Excavation and Spoils Data	1 Spoils I	Jata							
Sample Location	Sample	Sampling Internal	SAMPLE ID#	Date	[rubology]	VOC Headspace	GRO <sup>1</sup>	DRO*	TIMIL	BTEX	Benzene	Tolorne	Ethylbenzene	m/p/o Xylene	Chloride
		(FT BGS')				Ppm	то/Ка	m9/Kg	м9/Кд	mg/Kg	mg/Kg	marka	тожо	mo/Ka	morko
Background-300' south	Composite	0-1	SYTONACIZINABG	12/10/04	Sand	-	na	па	пa	173	211	17.	2	000	603
Bottom	Composite	-3	SYTONMC12100HNBIT	12/10/04	Sand	130.0	172	0611	1362	3,3553	(10373	0.46	0.708	2.15	13
Bottom	Composite	S	SXTO121504BHC	12/15/04	Sand	נט	<10.0	ON	QN	OZ.	OZ	ON	CIN	Ê	22
Northeast Sidewall	Composite	3	SXTONAICIEMMANE	12/10/04	Sand	+	<[0.0]>	QN	QN	QN	2	QN	ÛN	Î	: []
Northwest Sidewall	Composite	70	SXTONAICIZIMHNW	12/10/04	Sand	6.0	5,100	CIN	GN	QN	SZ	Q	QN	Î	6T
Southeast Sidewall	Composite	J	SXTONMC121004SE	12/10/04	Sand	=	90 >	16.2	16.2	0.013	QZ	0.0003	0000	0.007	3
Southwest Sidewall	Composite	Į	SXTONMC12100HSW	12/10/04	Sand	9	<10.0	OZ.	ŝ	QZ.	ŝ	ON	CZ	ĺ	
Spoils Pile	Composite	7	SNTONMICI21004SP	12/10/04	Sand	82	34.6	597	931.6	0.756	0.14	0.086	3	1) 569	5 3
Spoils Pite	East Comp	:	Stock Pile E.S.	12/14/04	Sand	35	70.7	1430	1500.7	1,399	0.336	0.145	QX	8160	3
Spoils Pile	West Comp.	1	Stock Pile W.S.	12/14/04	Sand	61*	80.3	1370	1450.3	1.734	0.392	0.152	CZ	1 10	11.
Spoids Pile	South Comp.		Stock Pile S.S.	12/14/04	Sand	65	59	1280	1339	1,283	0.13	0.203	0.098	0.852	3(1)
Spoils Pile	North Comp.	1	Snock Pile N.S.	12/14/04	Sand	85	55.6	2801	1137.6	1.461	10.394	0.109	80.0	0.97H	Rr.)
				Method Detection Limit	ction Limit		2	2			0.002	0,1112	C0110	0.00%	50111
		ž	New Mexico Oil Conservation D	Division Remedial Goals	edial Goals	0.001		-	351	50,000	10.0000				
100) ppm Isobutylene cabbration gas = 101 ppm	101 mgss = 101 pg	ושנ					ľ	ORCHORD = www.erenbellommelenbellom	response files	leaves of war = 4	Cache				
bys - below ground surface							F	na - not analyzed	zeił						
VOC-Volatile Organic Contaminants/Constituents	ntaminants/Const	intuents					0.		:	,	,				
'CRO-Ciasoline Range Organics C4-C12	ADICS CACT						- 2.	ND contribution of penzene, toluene, ethylt	ord above of	enzene, tolt is mribiel de	BIEA - Mass sum of benzene, folgene, ethylbenzene, and xylenes	enzene, an	d xylenes		
DRO-Diesel Range Organics C., C.,	C.C., C.								THE PERSON ASSESSED.	inc member of	Technical annual				

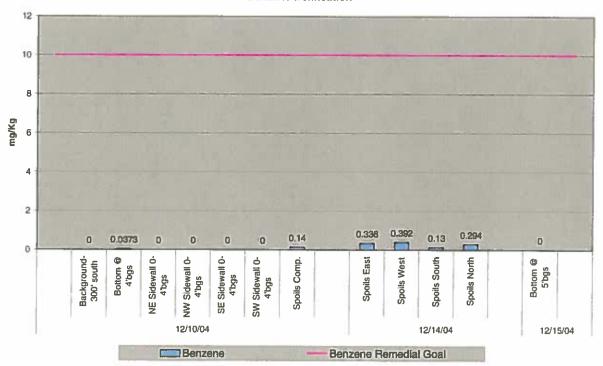
New Mexico State C NCT2 #10



# XTO Energy Inc. New Mexico State C NCT2 #10 BTEX Delineation

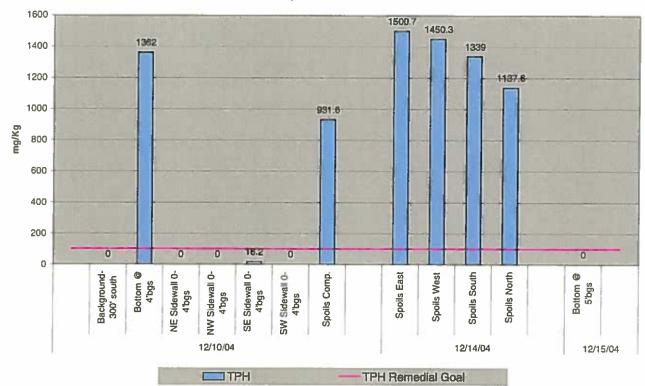


# XTO Energy Inc. New Mexico State C NCT2 #10 Benzene Delineation

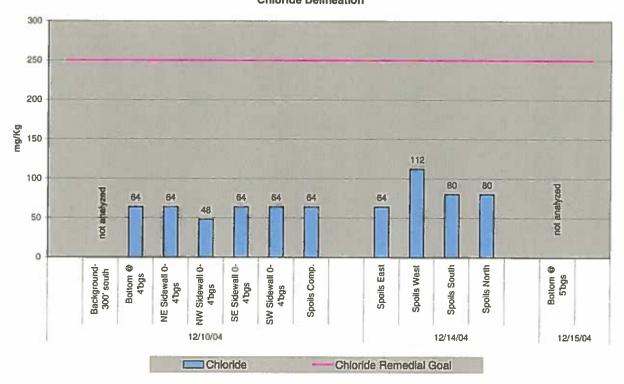




XTO Energy Inc.
New Mexico State C NCT2 #10
Total Petroleum Hydrocarbon 8015M Delineation



XTO Energy Inc.
New Mexico State C NCT2 #10
Chloride Delineation







### PHONE (915) 573-7001 • 2111 BEECHWOOD • ABILENE, TX 79503

PHONE (505) 393-2326 . 101 E. MARLAND . HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC. ATTN: PAT McCASLAND

P.O. BOX 1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 12/10/04 Reporting Date: 12/14/04

Project Owner: XTO

Project Name: NEW MEXICO C NCT #2

Project Location: NOT GIVEN

Sampling Date: 12/10/04 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: BC/AH

LAB NUMB	ER SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS	DATE	12/13/04	12/13/04	12/13/04
H9389-1	SXTONMC121004SE	<10.0	16.2	64
H9389-2	SXTONMC121004NE	<10.0	<10.0	64
H9389-3	SXTONMC121004NBH	172	1190	64
H9389-4	SXTONMC121004NW	<10.0	<10.0	48
H9389-5	SXTONMC121004SW	<10.0	<10.0	54
H9389-6	SXTONMC121004SP	34.6	897	64
Quality Con	trol	754	810	1000
True Value	QC	800	800	1000
% Recovery		94.3	101	100
Relative Pe	rcent Difference	0.3	1.6	3.0

METHODS; TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analyses performed on 1:4 w:v aqueous extracts.

Chemist (

Date

### H9389.XLS

PLEASE NOTE: Liability and Demages. Cardina's liability and client's acclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. At claims, including those for negligence and any other cause whetpower shall be deemed valved unless made in writing and received by Cardinals within thiny (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profile incurred by client, its subsidiaries, affiliates or successors-arising out of or related to the performance of services hereunder by Cardinals, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





### PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

**ANALYTICAL RESULTS FOR** ENVIRONMENTAL PLUS, INC. ATTN: PAT McCASLAND P.O. BOX 1558 **EUNICE, NM 88231** 

FAX TO: (505) 394-2601

Receiving Date: 12/10/2004 Reporting Date: 12/14/2004 Project Number: XTO

Project Name: NEW MEXICO C NCT#2

Project Location: NOT GIVEN

Sampling Date: 12/10/2004

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: VB

LAB NUMB	ERSAMPLE ID	MTBE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS	DATE:	12/13/04	12/13/04	12/13/04	12/13/04	12/13/04
H9389-1	SXTONMC121004SE	<0.002	<0.002	0.003	0.003	0.007
H9389-2	SXTONMC121004NE	<0.002	<0.002	<0.002	< 0.002	<0.006
H9389-3	SXTONMC121004NBH	0.011	0.373	0.460	0.708	2.15
H9389-4	SXTONMC121004NW	<0.002	< 0.002	<0.002	<0.002	<0.006
H9389-5	SXTONMC121004SW	<0.002	< 0.002	< 0.002	<0.002	<0.006
H9389-6	SXTONMC121004SP	0.003	0.140	0.086	0.101	0.569
Quality Con	trol	0.092	0.108	0.105	0.105	0.311
True Value		0.100	0.100	0.100	0.100	0.300
% Recovery	/	91.6	108	105	105	104
Relative Pe	rcent Difference	7.0	1.9	2.0	2.6	5.4

METHODS: EPA - SW 846-8021B, 5030B; Gas Chromatography

Victor Blunt Victor Blunt, Ph.D.

12/14/2004 Date

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# Cardinal Laboratories Inc.

2111 Beechwood, Abilene, TX 79603 915-673-7001 Fax 915-673-7020

101 East Marland, Hobbs, NM 88240 505-393-2326 Fax 505-393-2476

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Project Manager	anager Pat McCasland	ısland															H	H	$\vdash$	-	$\vdash$	L	Г	
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### PHONE (915) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79803

PHONE (505) 383-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC. ATTN: PAT McCASLAND P.O. BOX 1558 EUNICE, NM 88231

FAX TO:

Receiving Date: 12/14/04 Reporting Date: 12/15/04

Project Owner: XTO

Project Name: NEW MEXICO "C" NCT-2 Project Location: NOT GIVEN Sampling Date: 12/14/04 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC Analyzed By: BC/AH

LAB NUMB	ER SAMPLE ID	GRO (C <sub>6</sub> -C₁₀) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	CI* (mg/Kg)
ANALYSIS	DATE	12/14/04	12/14/04	12/15/04
H9399-1	STOCK PILE E.S.	70.7	1430	64
H9399-2	STOCK PILE W.S.	80.3	1370	112
H9399-3	STOCK PILE S.S.	59.0	1280	80
H9399-4	STOCK PILE N.S.	55.6	1082	80
Quality Con	trol	810	792	1000
True Value	QC	800	800	1000
% Recovery	,	101	98.9	100
Relative Pe	rcent Difference	4.0	1.6	3.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analyses performed on 1:4 w:v aqueous extracts.

Sur essfaloshe

Date

### H9399A.XLS

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PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS INC. ATTN: PAT McCASLAND

P.O. BOX 1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 12/14/2004 Reporting Date: 12/16/2004 Project Number: XTO

Project Name: NEW MEXICO C NCT#2

Project Location: NOT GIVEN

Sampling Date: 12/14/2004

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: VB

LAB NUMBER	R SAMPLE ID	MTBE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DA	ATE:	12/16/04	12/16/04	12/16/04	12/16/04	12/16/04
H9399-1	STOCK PILE E.S	0.014	0.336	0.145	<0.002	0.918
H9399-2	STOCK PILE W.S	0.014	0.392	0.152	<0.002	1.19
H9399-3	STOCK PILE S.S	0.008	0.130	0.203	0.098	0.852
H9399-4	STOCK PILE N.S	0.015	0.294	0.109	0.080	0.978
Quality Contro	<b>N</b>	0.086	0.0937	0.0895	0.0920	0.271
True Value Q		0.100	0.100	0.100	0.100	0.300
% Recovery		86.3	93.7	89.5	92.0	90.3
Relative Perce	ent Difference	0.4	7.4	8.5	7.3	7.2

METHODS: EPA - SW 846-8021B, 5030B; Gas Chromatography

Wictor Blunt
Chemist

12/16/2004

Date

PLEASE NOTE: Liability and Damages. Cardinel's liability and client's exclusive remady for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysiss. All clayes, including the property of the contract or tort, shall be simited by client for analysiss. All clayes, including the property of the contract of tort, shall be sented whether unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no western that Cardinal within thirty (30) days after completion of the applicable service. Including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services herounder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

company Name: 2	ľ				03. 77		ANALYSIS R	REQUEST	ıſ
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Cardinal cannot accept verbal changes. Please fax written changes to (325) 873-7020.

New Mexico State C NCT2 #10





### PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79803

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR **ENVIRONMENTAL PLUS, INC.** ATTN: PAT McCASLAND

P.O. BOX 1558 **EUNICE, NM 88231** FAX TO: (505) 394-2601

Receiving Date: 12/15/04 Reporting Date: 12/16/04

Project Owner: XTO Project Name: NEW MEXICO C NCT-2

Project Location: NOT GIVEN

Sampling Date: 12/15/04 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: BC

		GRO	DRO
LAB NUMBER	SAMPLE ID	(C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)
LAD HOMBEN	O/ 0111 EE 10	(3/3/	(33)

ANALYSIS I	DATE:	12/15/04	12/15/04
H9404-1	SXTO121504BHC	<10.0	<10.0
Quality Con	trol	810	792
True Value	QC	800	800
% Recovery		101	98.9
	cent Difference	4.0	1.6

METHOD: SW-846 8015 M

motity and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or fort, shall be limited to the amount paid by client for any those for negligence and any other cause whatsoever shall be deemed welved unless made in writing and inceived by Cardinal within thiny (30) days after completion of the appropriate the liability in the completion of the appropriate the liability in the completion of the appropriate that it is substantially constrained to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above added any other claims.





PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 · 101 E. MARLAND · HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS INC. ATTN: PAT McCASLAND P.O. BOX 1558 EUNICE, NM 88231 FAX TO: (505) 394-2601

Receiving Date: 12/15/2004 Reporting Date: 12/16/2004 Project Number: XTO

Project Name: NEW MEXICO C NCT #2

Project Location: NOT GIVEN

Sampling Date: 12/15/2004

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: VB

LAB NUMBER	SAMPLE ID	MTBE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DA	TE:	12/16/04	12/16/04	12/16/04	12/16/04	12/16/04
H9404-1	SXTO121504BHC	<0.002	<0.002	<0.002	<0.002	<0.006
= -						
Quality Control		0.086	0.0937	0.0895	0.0920	0.271
True Value QC		0.100	0.100	0.100	0.100	0.300
% Accuracy		86.3	93.7	89.5	92.0	90.3
Relative Perce	nt Difference	0.4	7.4	8.5	7.3	7.2

METHODS: EPA - SW 846-8021B, 5030B; Gas Chromatography

Mictor Blunt
Chemist

12/16/2004

Date

PLEASE NOTE: Liability and Demages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, small be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whetsoever shall be deemed valved unless made in writing and received by Cardinal within think (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without finitelion, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of centrols benander by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

NT N

# Cardinal Laboratories Inc.

2111 Beechwood, Abilene, TX 79603 915-673-7001 Fax 915-673-7020

101 East Marland, Hobbs, NM 88240 505-393-2326 Fax 505-393-2476

Company Name	Name XTO									P.	Rill To	5	. 11 7000	Supplied Street	100			ľ				1		I	
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New Mexico State C NCT2 #10

## Attachment B

NMOCD Email Correspondence Requesting Further Soil Sampling Copy dated April 26, 2018 From: Yu, Olivia, EMNRD

To: <u>Donald, Patricia; "Mann, Ryan"</u>

Cc: Williams, Luke

Subject: RE: New Mexico State C NCT2 #10

Date: Thursday, April 26, 2018 3:10:00 PM

**Attachments:** reviewed\_1RP5027\_SUBMITTED Final Report with Final C-141.pdf

Ms. Donald:

#### Notes:

- NMOCD database indicates State surface and mineral ownership with the additional notation that Section is under the CCA Conservation agreement.
- As the incident was not assigned a 1RP at the time of the release, 1RP-5027 is currently designated for documentation.

NMOCD appreciates XTO's efforts in finding this report for work completed in 2005. However, the final C-141 is not accepted. Please address the following concerns.

- 1. The provided map did not indicate sample locations. Are there any records of where sidewalls and bottom were taken? Aerial imagery from 2005 suggest that the impacted area is larger than outlined on the map.
- 2. As written, the release area on the caliche pad North of the tank battery was removed to 1 ft. bgs, were confirmation samples taken?
- 3. Were any samples collected for the release area inside the berms, adjacent to the release point?
- 4. Photo documentation seem to indicate that the laboratory results were for samples from the impacted pasture area. What was the depth of removal? The one bottom sample was from 5 ft. bgs. Was the entire impacted pasture area removed to 5 ft. bgs?

NMSLO may have additional comments or concerns.

Thanks, Olivia

From: McDaniel, James <James\_McDaniel@xtoenergy.com>

Sent: Thursday, December 21, 2017 8:57 AMTo: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>Cc: Williams, Luke <Luke\_Williams@xtoenergy.com>

Subject: New Mexico State C NCT2 #10

James McDaniel EH&S Supervisor CHMM #15676 CSP #30009 XTO Energy Inc. 382 Road 3100

Aztec, New Mexico 87410

Phone: <u>505.333.3701</u> | Mobile: <u>505.787.0519</u>

james mcdaniel@xtoenergy.com

An ExxonMobil Subsidiary

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]

Sent: Wednesday, December 20, 2017 1:02 PM

**To:** McDaniel, James **Cc:** Williams, Luke

**Subject:** electronic copies of reports

Mr. McDaniel:

For the reports dropped off at the NMOCD-Hobbs office today, please submit them in electronic format as well. I do not work with paper copies.

Thanks,

Olivia Yu Environmental Specialist NMOCD, District I Olivia.yu@state.nm.us 575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

### Attachment C

Site Plan & Soil Sampling Diagram

### Attachment D

0.5-Mile Radius Map Demonstrating Absence of Major Watercourses

### Attachment E

Groundwater Depth Data

Received by OCD: 4/15/2020 4:22:24 PM Page 44 of 165



# New Mexico Office of the State Engineer Wells with Well Log Information

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right

(R=POD has been replaced, O=orphaned,

C=the file is (quarticlosed)

file.)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (

(NAD83 UTM in meters)

(in feet)

	POD														
	Sub-			qqq	ı						Log File	Depth	Depth		License
POD Number	Code basin	County	Source	6416 4	Sec	Tws	Rng	Х	Υ	Distance Start Date	Finish Date Date	Well	Water D	riller	Number
<u>L 04410</u>	L	LE	Shallow	4 2	19	20S	37E	661070	3603856*	56 05/25/1966	05/25/1966 06/02/196	6 84	35 A	BBOTT JR, MURRELL	46
L 02450	L,	LE	Shallow	2 2	19	208	37E	661063	3604259*	346 12/23/1953	12/23/1953 01/04/195	4 70	35		46
<u>L 04410 S</u>	L	LE	Shallow	4 1 2	19	20S	37E	660760	3604152*	387 02/21/1972	02/23/1972 02/28/197	2 100	35 A	BBOTT, MURRELL	46

Record Count: 3

**UTMNAD83 Radius Search (in meters):** 

**Easting (X):** 661064.78 **Northing (Y):** 3603912.34

Radius: 804

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/16/18 8:40 AM Page 1 of 1 WELLS WITH WELL LOG INFORMATION



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

**Well Tag POD Number** 

Q64 Q16 Q4 Sec Tws Rng

X

L 02450 19 20S 37E 661063 3604259\*



**Driller License: 46** 

**Driller Company:** ABBOTT BROTHERS COMPANY

**Driller Name:** 

**Drill Start Date:** 12/23/1953

6.63

**Drill Finish Date:** 

12/23/1953

**Plug Date:** 

Log File Date:

01/04/1954

**PCW Rcv Date:** 01/04/1954

Source:

Shallow

**Pump Type: Casing Size:**  Pipe Discharge Size:

**Depth Well:** 

70 feet

**Estimated Yield:** 

**Depth Water:** 

35 feet

**Water Bearing Stratifications:** 

**Top Bottom Description** 

35

70 Sandstone/Gravel/Conglomerate

**Casing Perforations:** 

**Top Bottom** 35

70

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

L 04410 S

4 1 2 19 20S 37E

660760 3604152\*

9

Driller License: 46 Driller Company: ABBOTT BROTHERS COMPANY

Driller Name: ABBOTT, MURRELL

**Drill Start Date:** 02/21/1972

**Drill Finish Date:** 02/23/1972

Plug Date:

Log File Date:

02/28/1972

PCW Rcv Date: 02/01/1973

Source:

Shallow

Pump Type:

TURBIN

Pipe Discharge Size: 90

Estimated Yield:

**Casing Size:** 

11.75

Depth Well: 10

100 feet

Depth Water: 35 feet

Water Bearing Stratifications: Top Bottom Description

35 75 Sandstone/Gravel/Conglomerate

Casing Perforations: Top Bottom

0 5

5 17

17 35

35 75

75 100

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



## New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag POD Number

Q64 Q16 Q4 Sec Tws Rng

X Y

L 04410

4 2 19 20S 37E

661070 3603856\*

56\* 🍯

Driller License: 46

**Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name: ABBOTT JR, MURRELL

11.75

**Drill Start Date:** 05/25/1966

**Drill Finish Date:** 05/25/1966

Plug Date:

Log File Date: 06

06/02/1966

**PCW Rcv Date:** 05/08/1968

Source:

Shallow

Pump Type: Casing Size:

Pipe Discharge Size: 2

**Depth Well:** 

262 84 feet **Estimated Yield:** 

**Depth Water:** 

35 feet

Water Bearing Stratifications:

**Top Bottom Description** 

35 66 Sandstone/Gravel/Conglomerate

**Casing Perforations:** 

**Top Bottom** 0 30

30 35

35 66

66 7070 84

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Attachment F

Waste Manifests

Received by OCD: 4/15/2020 4:22:24 PM	
SUNDANCE SERVICES, Inc.	ETN. E21000
P.O. Box 1737 Eunice, New Mexico 88231  Business: (575) 394-2511 • Disposal: (575) 390-7842	ET No. 531902
LEASE OPERATOR/SHIPPER/COMPANY:	DATE: 10 110-10
LEASE NAME:	TIME: AM/PM
RIG NAME & NUMBER:	VEHICLE NO:
	ONE:
10000	ONE:
HILLY DOPONT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CHARGE TO: 170	
TYPE OF [ ] Tank Bottoms [ ] Drilling Fluids [ ] Rinsate	[ ] BS&W Content:
MATERIAL [ ] Solids [ ] Contaminated Soil [ ] Jet Out	
Description:	
VOLUME OF LIBRIS . INVARD .	
MATERIAL : []BBLS. : []YARD ::	
RRC or API # C-133#	N.M.
AS A CONDITION TO CUMPANCE CEDIVICE. INC/C ACCEDTANCE	PE OF THE MATERIAL COMPRED WHILL THE
STICKERS, CODES, NUMBERS, ETC.  AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRA	NTS THAT THE WASTE MATERIAL SHIPPED
HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, COI  AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et	
361.001 et seq., AND REGULATIONS RELATED THERETO, B' DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WAST	VIRTUE OF THE EXEMPTION AFFORDED
DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL	
ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCE	
BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIV	
SERVICES, INC.'S FACILITY FOR DISPOSAL.	Francis outou Chatana and at the
<b>THIS WILL CERTIFY</b> that the above Transporter loaded the material represented by this above described location, and that it was tendered by the above described shipper. This v	
materials were added to this load, and that the material was delivered without incident.	
DRIVER: The Mark & Market & Ma	
(SIGNATURE)  FACILITY REPRESENTATIVE:	
(SIGNATURE)	
White - Sundance Canary - Sundance Acct #1 Pink - T	ransporter
Reorder from: Vertigo Creative Services LLC • www.VertigoCreative.com • Form#SDI-	004b
neotae nominatings creative services and minimizers	

### Attachment G

Analytical Reports and Chain-of-Custody Forms

THE LEADER IN ENVIRONMENTAL TESTING

### **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-161842-1

TestAmerica SDG: XTO Historical Release Site

Characterization

Client Project/Site: New Mexico C State NCT-2 #010

or.

Sport Environmental Services LLC 502 N Big Spring St Midland, Texas 79701

Attn: Debi Sport Moore



Authorized for release by: 10/31/2018 1:06:31 PM

Jennifer Gambill, Project Manager I (615)301-5044

jennifer.gambill@testamericainc.com

·····LINKS ······

Review your project results through

Total Access

**Have a Question?** 



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

4

2

3

6

<u>ρ</u>

q

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

## **Table of Contents**

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	10
QC Association	14
Chronicle	16
Method Summary	18
Certification Summary	19
Chain of Custody	20

### **Sample Summary**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Solid	10/22/18 12:35	10/24/18 09:45
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Solid	10/22/18 12:35	10/24/18 09:45
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Solid	10/22/18 12:50	10/24/18 09:45
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Solid	10/22/18 13:15	10/24/18 09:45

3

4

5

7

8

46

11

19

#### **Case Narrative**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010

TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

Job ID: 490-161842-1

Laboratory: TestAmerica Nashville

**Narrative** 

Job Narrative 490-161842-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/24/2018 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

#### **GC/MS VOA**

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: NCT-CP-CS1-001 (0-1' bgs) (490-161842-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Internal standard (ISTD) response for 1.4-dichlorobenzene-d4 in the following samples was outside of acceptance limits: NCT-CP-CS1-001 (0-1' bgs) (490-161842-1). None of the compounds reported in the sample are associated with this ISTD; therefore, the data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8015B: The following sample was diluted to bring the concentration of target analytes within the calibration range: NCT-CP-CS3-001 (5' bgs) (490-161842-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **Definitions/Glossary**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

### **Qualifiers**

#### **GC/MS VOA**

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits

X Surrogate is outside control limits

Method Detection Limit

Minimum Level (Dioxin)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Not Calculated

**Quality Control** 

### Glossary

MDL

ML

NC

ND

**PQL** 

QC RER

RL

**RPD** 

**TEF** 

**TEQ** 

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

TestAmerica Nashville

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1
Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

Client Sample ID: NCT-CP-CS1-001 (0-1' bgs)

Lab Sample ID: 490-161842-1

Date Collected: 10/22/18 12:35

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000658	mg/Kg		10/24/18 14:18	10/25/18 01:31	1
Ethylbenzene	ND		0.00196	0.000658	mg/Kg		10/24/18 14:18	10/25/18 01:31	1
Toluene	ND		0.00196	0.000727	mg/Kg		10/24/18 14:18	10/25/18 01:31	1
Xylenes, Total	ND		0.00589	0.00121	mg/Kg		10/24/18 14:18	10/25/18 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130				10/24/18 14:18	10/25/18 01:31	1
4-Bromofluorobenzene (Surr)	144	* X	70 - 130				10/24/18 14:18	10/25/18 01:31	1
Dibromofluoromethane (Surr)	107		70 - 130				10/24/18 14:18	10/25/18 01:31	1
Toluene-d8 (Surr)	114		70 - 130				10/24/18 14:18	10/25/18 01:31	1
Method: 8015B - Gasoline Rai						_			
Method: 8015B - Gasoline Rai		cs - (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B - Gasoline Rai Analyte			RL 4.80		Unit mg/Kg	<u>D</u>	Prepared 10/24/18 14:18	Analyzed 10/25/18 18:56	Dil Fac
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier				<u>D</u>			Dil Fac
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier	4.80			<u>D</u>	10/24/18 14:18	10/25/18 18:56	1
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene	Result ND %Recovery 81	Qualifier Qualifier	4.80			<u> </u>	10/24/18 14:18  Prepared	10/25/18 18:56  Analyzed	1
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range	Result ND %Recovery 81  Organics (	Qualifier Qualifier	4.80	2.40		<u>D</u>	10/24/18 14:18  Prepared	10/25/18 18:56  Analyzed	Dil Fac
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte	Result ND %Recovery 81  Organics (	Qualifier  Qualifier  DRO) (GC)	4.80  Limits  50 - 150	2.40 MDL	mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18	10/25/18 18:56 <b>Analyzed</b> 10/25/18 18:56	Dil Fac
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	Result ND  %Recovery 81  Organics (  Result	Qualifier  Qualifier  DRO) (GC)	4.80  Limits  50 - 150	2.40 MDL 2.48	mg/Kg Unit		10/24/18 14:18  Prepared 10/24/18 14:18  Prepared 10/24/18 15:10	10/25/18 18:56  Analyzed  10/25/18 18:56  Analyzed	1
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result ND  %Recovery 81  Organics ( Result 175	Qualifier  Qualifier  DRO) (GC) Qualifier	4.80  Limits  50 - 150  RL  4.95	2.40 MDL 2.48	mg/Kg  Unit mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18  Prepared 10/24/18 15:10	10/25/18 18:56  Analyzed 10/25/18 18:56  Analyzed 10/25/18 16:05	Dil Fac  Dil Fac  1

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1
Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

Client Sample ID: NCT-CP-CS2-001 (1'-2' bgs)

Lab Sample ID: 490-161842-2

Date Collected: 10/22/18 12:35

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00191	0.000641	mg/Kg		10/24/18 14:18	10/25/18 01:59	1
Ethylbenzene	ND		0.00191	0.000641	mg/Kg		10/24/18 14:18	10/25/18 01:59	1
Toluene	ND		0.00191	0.000707	mg/Kg		10/24/18 14:18	10/25/18 01:59	1
Xylenes, Total	ND		0.00574	0.00118	mg/Kg		10/24/18 14:18	10/25/18 01:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 130				10/24/18 14:18	10/25/18 01:59	1
4-Bromofluorobenzene (Surr)	102		70 - 130				10/24/18 14:18	10/25/18 01:59	1
Dibromofluoromethane (Surr)	103		70 - 130				10/24/18 14:18	10/25/18 01:59	1
Toluene-d8 (Surr)	101		70 - 130				10/24/18 14:18	10/25/18 01:59	1
,									
Method: 8015B - Gasoline Ra	nge Organio	s - (GC)							
		s - (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte			RL 4.42	MDL 2.21		D	Prepared 10/24/18 14:18	Analyzed 10/25/18 14:28	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier				<u>D</u>	•		Dil Fac  Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate	Result	Qualifier	4.42			_ <u>D</u>	10/24/18 14:18	10/25/18 14:28	1
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene	Result ND %Recovery 80	Qualifier Qualifier	4.42			_ <u>D</u>	10/24/18 14:18  Prepared	10/25/18 14:28  Analyzed	1 Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range	Result ND %Recovery 80  Corganics (	Qualifier Qualifier	4.42		mg/Kg	<u>D</u>	10/24/18 14:18  Prepared	10/25/18 14:28  Analyzed	1 Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte	Result ND %Recovery 80  Corganics (	Qualifier  Qualifier  DRO) (GC)	4.42 <b>Limits</b> 50 - 150	2.21 MDL	mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18	10/25/18 14:28  Analyzed 10/25/18 14:28	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	Result ND %Recovery 80 Crganics ( Result	Qualifier  Qualifier  DRO) (GC)	4.42  Limits  50 - 150	2.21 MDL 2.45	mg/Kg		10/24/18 14:18  Prepared  10/24/18 14:18  Prepared	10/25/18 14:28  Analyzed  10/25/18 14:28  Analyzed	Dil Fac
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28] MRO (C28-C35)  Surrogate	Result ND  %Recovery 80  Organics ( Result ND	Qualifier  Qualifier  DRO) (GC) Qualifier	4.42  Limits  50 - 150  RL  4.91	2.21 MDL 2.45	mg/Kg  Unit mg/Kg		Prepared  Prepared  10/24/18 14:18  Prepared  10/24/18 15:10	10/25/18 14:28  Analyzed 10/25/18 14:28  Analyzed 10/25/18 16:22	Dil Fac

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1 Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

Client Sample ID: NCT-CP-CS3-001 (5' bgs)

Lab Sample ID: 490-161842-3 Date Collected: 10/22/18 12:50 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00188	0.000631	mg/Kg		10/24/18 14:18	10/25/18 02:27	1
Ethylbenzene	ND		0.00188	0.000631	mg/Kg		10/24/18 14:18	10/25/18 02:27	1
Toluene	ND		0.00188	0.000697	mg/Kg		10/24/18 14:18	10/25/18 02:27	1
Xylenes, Total	ND		0.00565	0.00116	mg/Kg		10/24/18 14:18	10/25/18 02:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130				10/24/18 14:18	10/25/18 02:27	1
4-Bromofluorobenzene (Surr)	100		70 - 130				10/24/18 14:18	10/25/18 02:27	1
Dibromofluoromethane (Surr)	105		70 - 130				10/24/18 14:18	10/25/18 02:27	1
Toluene-d8 (Surr)	99		70 - 130				10/24/18 14:18	10/25/18 02:27	1
_									
Method: 8015B - Gasoline Ra	nge Organio	:s - (GC)							
		cs - (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte			RL 4.91		Unit mg/Kg	<u>D</u>	Prepared 10/24/18 14:18	Analyzed 10/25/18 14:58	Dil Fac
	Result	Qualifier				<u>D</u>	<u> </u>		Dil Fac  1  Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate	Result ND	Qualifier	4.91			<u>D</u>	10/24/18 14:18	10/25/18 14:58	1
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene	Result ND %Recovery 81	Qualifier Qualifier	4.91			<u>D</u>	10/24/18 14:18  Prepared	10/25/18 14:58  Analyzed	1
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range	Result ND %Recovery 81  Organics (	Qualifier Qualifier	4.91	2.46		<u>D</u>	10/24/18 14:18  Prepared	10/25/18 14:58  Analyzed	1
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte	Result ND %Recovery 81  Organics (	Qualifier  Qualifier  DRO) (GC)	4.91 <b>Limits</b> 50 - 150	2.46	mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18	10/25/18 14:58  Analyzed 10/25/18 14:58	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	Result  ND  %Recovery 81  Organics (  Result	Qualifier  Qualifier  DRO) (GC)	4.91  Limits  50 - 150	2.46 MDL 4.97	mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18  Prepared	10/25/18 14:58  Analyzed  10/25/18 14:58  Analyzed	Dil Fac
	Result ND  %Recovery 81  Organics (  Result 180	Qualifier  Qualifier  DRO) (GC) Qualifier	4.91  Limits  50 - 150  RL  9.93	2.46 MDL 4.97	mg/Kg  Unit mg/Kg		10/24/18 14:18  Prepared 10/24/18 14:18  Prepared 10/26/18 16:04	10/25/18 14:58  Analyzed 10/25/18 14:58  Analyzed 10/28/18 21:47	Dil Fac  Dil Fac  2

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1 Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

Client Sample ID: NCT-IC-CS1-001 (2'-3' bgs)

Lab Sample ID: 490-161842-4 Date Collected: 10/22/18 13:15 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00179	0.000599	mg/Kg		10/24/18 14:18	10/25/18 02:55	1
Ethylbenzene	ND		0.00179	0.000599	mg/Kg		10/24/18 14:18	10/25/18 02:55	1
Toluene	ND		0.00179	0.000662	mg/Kg		10/24/18 14:18	10/25/18 02:55	1
Xylenes, Total	ND		0.00537	0.00110	mg/Kg		10/24/18 14:18	10/25/18 02:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130				10/24/18 14:18	10/25/18 02:55	1
4-Bromofluorobenzene (Surr)	98		70 - 130				10/24/18 14:18	10/25/18 02:55	1
Dibromofluoromethane (Surr)	104		70 - 130				10/24/18 14:18	10/25/18 02:55	1
Toluene-d8 (Surr)	99		70 - 130				10/24/18 14:18	10/25/18 02:55	1
Method: 8015B - Gasoline Rai			ъ.		11	_	<b>D</b>	Austras	D:: F
Method: 8015B - Gasoline Rai		s - (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B - Gasoline Rai Analyte			RL 4.59		Unit mg/Kg	<u>D</u>	Prepared 10/24/18 14:18	Analyzed 10/25/18 15:28	Dil Fac
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier				D 			Dil Fac
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier	4.59			<u>D</u>	10/24/18 14:18	10/25/18 15:28	1
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene	Result ND %Recovery 83	Qualifier Qualifier	4.59			<u>D</u>	10/24/18 14:18  Prepared	10/25/18 15:28  Analyzed	1
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range	Result ND %Recovery 83 Corganics (	Qualifier Qualifier	4.59	2.29		<u>D</u>	10/24/18 14:18  Prepared	10/25/18 15:28  Analyzed	Dil Fac
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte	Result ND %Recovery 83 Corganics (	Qualifier  Qualifier  DRO) (GC)	4.59 <b>Limits</b> 50 - 150	2.29 MDL	mg/Kg	=	10/24/18 14:18  Prepared 10/24/18 14:18	10/25/18 15:28 <b>Analyzed</b> 10/25/18 15:28	Dil Fac
Method: 8015B - Gasoline Ran Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range Analyte Diesel Range Organics [C10-C28]	Result ND  %Recovery 83  Organics (  Result	Qualifier  Qualifier  DRO) (GC)	4.59  Limits  50 - 150	2.29 MDL 2.42	mg/Kg	=	10/24/18 14:18  Prepared 10/24/18 14:18  Prepared 10/26/18 16:04	10/25/18 15:28  Analyzed  10/25/18 15:28  Analyzed	1
Method: 8015B - Gasoline Rai Analyte Gasoline Range Organics [C6 - C10]	Result ND  %Recovery 83  Organics ( Result 11.0	Qualifier  Qualifier  DRO) (GC) Qualifier	4.59  Limits  50 - 150  RL  4.84	2.29 MDL 2.42	mg/Kg  Unit mg/Kg	=	10/24/18 14:18  Prepared 10/24/18 14:18  Prepared 10/26/18 16:04	10/25/18 15:28  Analyzed 10/25/18 15:28  Analyzed 10/28/18 22:04	Dil Fac

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1 Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

### Method: 8260B - Volatile Organic Compounds (GC/MS)

103

96

Lab Sample ID: 490-161859-A-6-E MS **Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 552518 Prep Batch: 552418** Sample Sample Spike MS MS %Rec. Analyte **Result Qualifier** Added Result Qualifier Unit D %Rec Limits Benzene 0.0450 104 21 - 150 0.00162 J 0.04858 mg/Kg Ethylbenzene ND 0.0450 0.04583 102 mg/Kg 10 - 150 Toluene 0.00120 0.0450 0.04762 mg/Kg 103 17 - 150 Xylenes, Total 0.0899 0.09187 mg/Kg 102 10 - 150 ND MS MS %Recovery Qualifier Surrogate Limits 1,2-Dichloroethane-d4 (Surr) 70 - 130 107 4-Bromofluorobenzene (Surr) 93 70 - 130

70 - 130

70 - 130

Lab Sample ID: 490-161859-A-6-F MSD

**Matrix: Solid** 

Toluene-d8 (Surr)

**Analysis Batch: 552518** 

Dibromofluoromethane (Surr)

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 552418

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.00162	J	0.0479	0.04781		mg/Kg		96	21 - 150	2	50
Ethylbenzene	ND		0.0479	0.04459		mg/Kg		93	10 - 150	3	50
Toluene	0.00120	J	0.0479	0.04622		mg/Kg		94	17 - 150	3	50
Xylenes, Total	ND		0.0958	0.08867		mg/Kg		93	10 - 150	4	50

	MSD MSD	
Surrogate	%Recovery Qual	ifier Limits
1,2-Dichloroethane-d4 (Surr)	108	70 - 130
4-Bromofluorobenzene (Surr)	97	70 - 130
Dibromofluoromethane (Surr)	102	70 - 130
Toluene-d8 (Surr)	96	70 - 130

Lab Sample ID: MB 490-552518/7

**Matrix: Solid** 

**Analysis Batch: 552518** 

**Client Sample ID: Method Blank** Prep Type: Total/NA

	MB MB							
Analyte	Result Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.00200	0.000670 n	mg/Kg			10/25/18 00:35	1
Ethylbenzene	ND	0.00200	0.000670 n	mg/Kg			10/25/18 00:35	1
Toluene	ND	0.00200	0.000740 n	mg/Kg			10/25/18 00:35	1
Xylenes, Total	ND	0.00600	0.00123 n	mg/Kg			10/25/18 00:35	1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111	70 - 130		10/25/18 00:35	1
4-Bromofluorobenzene (Surr)	100	70 - 130		10/25/18 00:35	1
Dibromofluoromethane (Surr)	105	70 - 130		10/25/18 00:35	1
Toluene-d8 (Surr)	99	70 - 130		10/25/18 00:35	1

TestAmerica Nashville

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010

TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-552518/3

**Matrix: Solid** 

**Analysis Batch: 552518** 

<b>Client Sample</b>	<b>ID: Lab Control Sample</b>
	Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05052		mg/Kg		101	70 - 130	
Ethylbenzene	0.0500	0.04787		mg/Kg		96	70 - 130	
Toluene	0.0500	0.04868		mg/Kg		97	70 - 130	
Xylenes, Total	0.100	0.09630		mg/Kg		96	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130

**Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 552518** 

Lab Sample ID: LCSD 490-552518/4

LCSD LCSD %Rec. **RPD** Spike Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 0.0500 Benzene 0.04788 mg/Kg 96 70 - 130 5 37 Ethylbenzene 0.0500 0.04512 70 - 130 mg/Kg 90 6 38 Toluene 0.0500 0.04659 mg/Kg 93 70 - 130 40 Xylenes, Total 0.100 0.08981 90 mg/Kg 70 - 130 38

LCSD LCSD

MB MB

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	97		70 - 130

### Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-552396/1-A

**Matrix: Solid** 

**Analysis Batch: 552667** 

Client Sample ID: Method Blank Prep Type: Total/NA

**Prep Batch: 552396** 

Analyte Gasoline Range Organics [C6 - C10]	Result ND	Qualifier	RL 5.00	MDL 2.50	Unit mg/Kg	D	Prepared 10/24/18 12:27	Analyzed 10/25/18 13:58	Dil Fac
Surrogate	MB %Recovery		l imits				Prenared	Analyzed	Dil Fac

a,a,a-Trifluorotoluene <u>10/24/18 12:27</u> <u>10/25/18 13:58</u> 50 - 150 76

Lab Sample ID: LCS 490-552396/2-A **Matrix: Solid** 

**Analysis Batch: 552667** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA **Prep Batch: 552396** Spike LCS LCS %Rec. Added Result Qualifier Unit Limits %Rec

mg/Kg

86

70 - 130

429.9

Gasoline Range Organics [C6 -

Analyte

TestAmerica Nashville

500

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1

SDG: XTO Historical Release Site Characterization

### Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 490-552396/2-A **Matrix: Solid** 

**Analysis Batch: 552667** 

LCS LCS

%Recovery Qualifier Surrogate Limits a,a,a-Trifluorotoluene 50 - 150 87

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Prep Batch: 552396** 

**Prep Batch: 552396** 

Lab Sample ID: LCSD 490-552396/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Prep Batch: 552396 **Analysis Batch: 552667** Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Limits **Analyte** Unit D %Rec **RPD** Limit 500 429.7 mg/Kg 86 70 - 130 0 21 Gasoline Range Organics [C6 -C10]

LCSD LCSD %Recovery Qualifier I imits Surrogate

50 - 150 a,a,a-Trifluorotoluene 88

Lab Sample ID: 490-161842-2 MS Client Sample ID: NCT-CP-CS2-001 (1'-2' bgs) Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 552667** 

MS MS Sample Sample Spike %Rec. Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits

Gasoline Range Organics [C6 - $\overline{\mathsf{ND}}$ 442 389.0 mg/Kg 88 56 - 130

C10]

MS MS %Recovery Qualifier Surrogate Limits a,a,a-Trifluorotoluene 87 50 - 150

Lab Sample ID: 490-161842-2 MSD Client Sample ID: NCT-CP-CS2-001 (1'-2' bgs) Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 552667 Prep Batch: 552396 Spike MSD MSD %Rec. Sample Sample

**Analyte** Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit ND 442 383.2 mg/Kg 87 56 - 130 Gasoline Range Organics [C6 -C101

MSD MSD

Surrogate %Recovery Qualifier Limits 50 - 150 a,a,a-Trifluorotoluene 87

#### Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 490-553008/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 553227** MR MR

Released to Imaging: 6/23/2022 4:26:56 PM

Analyte Result Qualifier RI MDL Unit Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 5.00 <u>10/26/18 11:42</u> <u>10/27/18 16:17</u> 2.50 mg/Kg MRO (C28-C35) ND 5.00 mg/Kg 10/26/18 11:42 10/27/18 16:17 2.50

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 10/26/18 11:42 10/27/18 16:17 88 50 - 150 o-Terphenyl (Surr)

TestAmerica Nashville

**Prep Batch: 553008** 

**RPD** 

### **QC Sample Results**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

### Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 490- Matrix: Solid Analysis Batch: 553227	553008/2-A					Clier	nt Sa	mple ID	Prep Type: Total/NA Prep Batch: 553008
			Spike	LCS	LCS				%Rec.
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]			40.0	39.02		mg/Kg		98	54 - 130
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
o-Terphenyl (Surr)	87		50 - 150						

Lab Sample ID: 490-16194 Matrix: Solid Analysis Batch: 553227	3-A-1-F MS						С	lient Sa	Prep Ty	Matrix Spike pe: Total/NA atch: 553008
		Sample	Spike		MS	11	_	0/ <b>D</b> = =	%Rec.	
Analyte	3.33	Qualifier	Added	40.06	Qualifier	Unit	_ D	% <b>Rec</b>	10 - 142	
Diesel Range Organics [C10-C28]	3.33	J	39.6	40.06		mg/Kg		92	10 - 142	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl (Surr)	85		50 - 150

86

Lab Sample ID: 490-1619	Sample ID: 490-161943-A-1-G MSD								Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid									Prep Ty	pe: Tot	al/NA			
Analysis Batch: 553227									Prep Ba	itch: 5	53008			
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit			
Diesel Range Organics [C10-C28]	3.33	J	39.6	38.46		mg/Kg		89	10 - 142	4	47			
	MSD	MSD												
Surrogate	%Recovery	Qualifier	Limits											

50 - 150

o-Terphenyl (Surr)

### **QC Association Summary**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010

TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

#### **GC/MS VOA**

### **Prep Batch: 552418**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	5030B	
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	5030B	
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	5030B	
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	5030B	
490-161859-A-6-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-161859-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

#### **Analysis Batch: 552518**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	8260B	552418
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8260B	552418
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	8260B	552418
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	8260B	552418
MB 490-552518/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-552518/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-552518/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-161859-A-6-E MS	Matrix Spike	Total/NA	Solid	8260B	552418
490-161859-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	552418

### **GC VOA**

### Prep Batch: 552396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	5030B	
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	5030B	
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	5030B	
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	5030B	
MB 490-552396/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-552396/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-552396/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
490-161842-2 MS	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	5030B	
490-161842-2 MSD	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	5030B	

#### **Analysis Batch: 552667**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	8015B	552396
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8015B	552396
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	8015B	552396
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	8015B	552396
MB 490-552396/1-A	Method Blank	Total/NA	Solid	8015B	552396
LCS 490-552396/2-A	Lab Control Sample	Total/NA	Solid	8015B	552396
LCSD 490-552396/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	552396
490-161842-2 MS	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8015B	552396
490-161842-2 MSD	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8015B	552396

### **GC Semi VOA**

### **Prep Batch: 551989**

. Released to Imaging: 6/23/2022 4:26:56 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	3550C	

TestAmerica Nashville

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### **QC Association Summary**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

### GC Semi VOA (Continued)

### Prep Batch: 551989 (Continued)

Lab Sample ID Client Sample ID		Prep Type	Matrix	Method	Prep Batch
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	3550C	

#### **Analysis Batch: 552652**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	8015B	551989
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8015B	551989

### Prep Batch: 553008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	3550C	
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	3550C	
MB 490-553008/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-553008/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-161943-A-1-F MS	Matrix Spike	Total/NA	Solid	3550C	
490-161943-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

#### **Analysis Batch: 553223**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-1	NCT-CP-CS1-001 (0-1' bgs)	Total/NA	Solid	8015B	551989
490-161842-2	NCT-CP-CS2-001 (1'-2' bgs)	Total/NA	Solid	8015B	551989

#### **Analysis Batch: 553227**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-553008/1-A	Method Blank	Total/NA	Solid	8015B	553008
LCS 490-553008/2-A	Lab Control Sample	Total/NA	Solid	8015B	553008
490-161943-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B	553008
490-161943-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	553008

#### Analysis Batch: 553354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-161842-3	NCT-CP-CS3-001 (5' bgs)	Total/NA	Solid	8015B	553008
490-161842-4	NCT-IC-CS1-001 (2'-3' bgs)	Total/NA	Solid	8015B	553008

TestAmerica Nashville

Client Sample ID: NCT-CP-CS1-001 (0-1' bgs)

Lab Sample ID: 490-161842-1 Date Collected: 10/22/18 12:35 **Matrix: Solid** Date Received: 10/24/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.09 g	5.0 mL	552418	10/24/18 14:18	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	552518	10/25/18 01:31	AK1	TAL NSH
Total/NA	Prep	5030B			5.21 g	5.0 mL	552396	10/24/18 14:18	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	552667	10/25/18 18:56	S1S	TAL NSH
Total/NA	Prep	3550C			25.23 g	1.00 mL	551989	10/24/18 15:10	MBV	TAL NSH
Total/NA	Analysis	8015B		1			552652	10/25/18 16:05	S1S	TAL NSH
Total/NA	Prep	3550C			25.23 g	1.00 mL	551989	10/24/18 15:10	MBV	TAL NSH
Total/NA	Analysis	8015B		2			553223	10/27/18 13:47	GMH	TAL NSH

Lab Sample ID: 490-161842-2 Client Sample ID: NCT-CP-CS2-001 (1'-2' bgs)

Date Collected: 10/22/18 12:35 **Matrix: Solid** 

Date Received: 10/24/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.23 g	5.0 mL	552418	10/24/18 14:18	JLP	TAL NSF
Total/NA	Analysis	8260B		1	5 g	5 mL	552518	10/25/18 01:59	AK1	TAL NSF
Total/NA	Prep	5030B			5.66 g	5.0 mL	552396	10/24/18 14:18	JLP	TAL NSF
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	552667	10/25/18 14:28	S1S	TAL NSH
Total/NA	Prep	3550C			25.46 g	1.00 mL	551989	10/24/18 15:10	MBV	TAL NSH
Total/NA	Analysis	8015B		1			552652	10/25/18 16:22	S1S	TAL NSF
Total/NA	Prep	3550C			25.46 g	1.00 mL	551989	10/24/18 15:10	MBV	TAL NS
Total/NA	Analysis	8015B		1			553223	10/27/18 14:04	GMH	TAL NS

Lab Sample ID: 490-161842-3 Client Sample ID: NCT-CP-CS3-001 (5' bgs)

Date Collected: 10/22/18 12:50

Date Received: 10/24/18 09:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.31 g	5.0 mL	552418	10/24/18 14:18	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	552518	10/25/18 02:27	AK1	TAL NSH
Total/NA	Prep	5030B			5.09 g	5.0 mL	552396	10/24/18 14:18	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	552667	10/25/18 14:58	S1S	TAL NSH
Total/NA	Prep	3550C			25.17 g	1.00 mL	553008	10/26/18 16:04	MBV	TAL NSH
Total/NA	Analysis	8015B		2			553354	10/28/18 21:47	LOJ	TAL NSH

Client Sample ID: NCT-IC-CS1-001 (2'-3' bgs) Lab Sample ID: 490-161842-4

Date Collected: 10/22/18 13:15 Date Received: 10/24/18 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.59 g	5.0 mL	552418	10/24/18 14:18	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	552518	10/25/18 02:55	AK1	TAL NSH
Total/NA	Prep	5030B			5.45 g	5.0 mL	552396	10/24/18 14:18	JLP	TAL NSH

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**Matrix: Solid** 

**Matrix: Solid** 

### **Lab Chronicle**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010 TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

Lab Sample ID: 490-161842-4

Client Sample ID: NCT-IC-CS1-001 (2'-3' bgs)

Date Collected: 10/22/18 13:15 Date Received: 10/24/18 09:45 Lab Sample ID: 490-161842-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	552667	10/25/18 15:28	S1S	TAL NSH
Total/NA	Prep	3550C			25.81 g	1.00 mL	553008	10/26/18 16:04	MBV	TAL NSH
Total/NA	Analysis	8015B		1			553354	10/28/18 22:04	LOJ	TAL NSH

**Laboratory References:** 

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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### **Method Summary**

Client: Sport Environmental Services LLC Project/Site: New Mexico C State NCT-2 #010

TestAmerica Job ID: 490-161842-1 SDG: XTO Historical Release Site Characterization

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8015B	Gasoline Range Organics - (GC)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH

#### **Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica Nashville

### **Accreditation/Certification Summary**

Client: Sport Environmental Services LLC TestAmerica Job ID: 490-161842-1
Project/Site: New Mexico C State NCT-2 #010 SDG: XTO Historical Release Site Characterization

### **Laboratory: TestAmerica Nashville**

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025	<del></del> -	0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
lowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18 *
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18 *
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

TestAmerica Nashville

<sup>\*</sup> Accreditation/Certification renewal pending - accreditation/certification considered valid.

Nashville, TN



### **COOLER RECEIPT FORM**

Cooler Received/Opened On 10/24/2018 @ 9:45	
Time Samples Removed From Cooler 1401 Time Samples Placed In Storage	(2 Hour Window)
1. Tracking # 8099 (last 4 digits, FedEx) Courier: FedEx	
IR Gun ID 17960358 pH Strip Lot NA Chlorine Strip Lot NA	
2. Temperature of rep. sample or temp blank when opened: 1, 2 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO., NA
4. Were custody seals on outside of cooler?	Æ\$/NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	YESNONA
6. Were custody papers inside cooler?	YESNONA
I certify that I opened the cooler and answered questions 1-6 (Intial)	
7. Were custody seals on containers: YES (NO) and Intact	YESNO.
Were these signed and dated correctly?	YESNO.(NA)
8. Packing mat'l used? Rubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper	
	Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	(ES)NONA
12. Did all container labels and tags agree with custody papers?	(YES)NONA
13a. Were VOA vials received?	YESNONA
b. Was there any observable headspace present in any VOA vial?	YESNONA
, , , ,	O
Larger than this.	÷
14. Was there a Trip Blank in this cooler? YES. (NONA If multiple coolers, sequence	#
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNONA
b. Did the bottle labels indicate that the correct preservatives were used	YES. NONA
16. Was residual chlorine present?	YESNO(NA)
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	<u>GH</u>
17. Were custody papers properly filled out (ink, signed, etc)?	KESNONA
18. Did you sign the custody papers in the appropriate place?	VESNONA
19. Were correct containers used for the analysis requested?	(YES):.NONA
20. Was sufficient amount of sample sent in each container?	YESNONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	
I certify that I attached a label with the unique LIMS number to each container (intial)	
21. Were there Non-Conformance issues at login? YESNO Was a NCM generated? YESNO#	

BIS = Broken in shipment Cooler Receipt Form.doc

LF-1 End of Form Page 20 of 21 Revised 8/23/17

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<b>TestAmerica Nashville</b> 2960 Foster Creighton Drive Nashville, TN 37204 Phone (615) 726-0177 Fax (615) 726-3404	Ö		f Cust	of Custody Record	ord				S I Page 3	<b>SestAmerico</b> THE LEADER IN EUVINONMEAS FALL TESTUM
Client Information	Sampler Bic Moci	Moove.		Lab PM: Gambill,	Lab PM: Gambill, Jennifer		Carrier Tracking No(s):	king No(s):	COC No:	
Client Contact Debi Sport Moore	Phone: (432) 633-	103-11	00	E-Mail: jennifer.	gambill@tes	E-Mail: jennifer.gambill@testamericainc.com	Ę		Page: Page of	
Сотралу: Sport Environmental Services LLC						Analysis	sis Requested		Job #:	
Address: 502 N Big Spring St	Due Date Requested:	1	Den TAT	2.33					Preservation	
City: Midland	TAT Requested (days):	·Ì							A - HCL B - NaOH C - Zn Aceta	45
State, Zip: TX, 79701	<b>Y</b>							-		
Phone: 432-683-1100	PO#: Purchase Order not requi	not required		₹″. <b>(6</b>   		-			G - Amchlor	r r
Email: debi@sportenv.com	WO #:			M 30 8	fan					
Project Name: Hostovical Release Site Character 179014499	TestAmerica Project #. 749014499	#		(¥e)	əp				K EDTA	· 11-
C State	SSDW#.			dwes	СЫогі				Other:	
		Sample	Sample Type (C≂comp,	Matrix et (W=water, Escolid, E	**************************************	68_6RO ОВ ВТЕХ			iedmiN la	Loc: 490 161842
Sample Identification	Sample Date	1		- 3	00E Z		7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	o escas, fringe, pre-anj	101 X	11
NCT-CP-CS+ 601 (0-1 bas)	61-22-01	1235	2	Solid	7	***			And	
-C52-641 (1-1	10-22-13	1235	ئ	Solid	×	×			. 🏃	
NCT - G- CS3- OG1 (51 bas)	12-22-01	17.50	5	Solid	メ	×			* A	
NCT - IC - CS1-041 (2-3' bos).	3120	1315	S	Solid	X	XX				
•				Solid	!				17.00 m	
Loudien NKT-IC-652				Solid					\$ 188	
32.560go,-103.20452".				Solid					erice)	
Location NoT -CP-CS (calidhe' pach				Solid					- 1	
confirmation sample) - GPS in				Solid					\$5.	
field notes,				Solid						
32,560840, -103,28451°		-		Solid					A. See	
Possible Hazard Identification  Non-Hazard — Flammable Skin Irritant Poison B	on B Unknown	Ц	Radiological		Sample Dis	iposal (A fee n To Client	may be assessed i	f samples are	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)   Return To Client	an 1 month) Months
ested: I, II, III, IV, Other (specify)					Special Inst	Special Instructions/QC Requirements:	equirements:			
		Date:		Time:	.e:		Metho	Method of Shipment	\	
Relinquished by:	Date/Time: 10 - 23 - 18	F.	55 thr.	Company Spert Fare Sales	Received by:	DX. DE	M	Date/Time:	4-18/00 g	45 Company NAS
Relinquíshed by:	'Date/Time:			ompany	Received by	<b>)</b> by:		Date/Time:	) 	Company
Relinquished by:	Date/Time:			Company	Received by:	by:		Date/Time:		Company
Custody Seals Intact.   Custody Seal No.:  A Yes A No					Cooler Te	mperature(s) °C a	Cooler Temperature(s) °C and Other Remarks.	7		
								4		Ver: 08/04/2016

# **Environment Testing TestAmerica**

### **ANALYTICAL REPORT**

Eurofins TestAmerica, Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

Laboratory Job ID: 490-176570-1

Laboratory SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Project/Site: XTO Energy

#### For:

Sport Environmental Services LLC 502 N Big Spring St Midland, Texas 79701

Attn: Debi Sport Moore



Authorized for release by: 7/11/2019 4:26:21 PM

Jennifer Gambill, Project Manager I (615)301-5044

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Released to Imaging: 6/23/2022 4:26:56 PM

Client: Sport Environmental Services LLC Project/Site: XTO Energy

Laboratory Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

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# **Sample Summary**

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
490-176570-1	BG-001 @ 0-1'bgs	Solid	06/26/19 10:14	06/29/19 08:50	
490-176570-2	BG-001 @ 5'bgs	Solid	06/26/19 10:18	06/29/19 08:50	
490-176570-3	BG-001 @ 10'bgs	Solid	06/26/19 10:19	06/29/19 08:50	
490-176570-4	BG-001 @ 15'bgs	Solid	06/26/19 10:20	06/29/19 08:50	
490-176570-5	BG-001 @ 20'bgs	Solid	06/26/19 10:21	06/29/19 08:50	
490-176570-6	SB1-002 @ 0-1'bgs	Solid	06/26/19 10:34	06/29/19 08:50	
490-176570-7	SB1-002 @ 5'bgs	Solid	06/26/19 10:35	06/29/19 08:50	
490-176570-8	SB1-002 @ 10'bgs	Solid	06/26/19 10:36	06/29/19 08:50	
490-176570-9	SB1-002 @ 15'bgs	Solid	06/26/19 10:37	06/29/19 08:50	
490-176570-10	SB1-002 @ 20'bgs	Solid	06/26/19 10:38	06/29/19 08:50	
490-176570-11	SB2-001 @ 0-1'bgs	Solid	06/26/19 10:42	06/29/19 08:50	
490-176570-12	SB2-001 @ 5'bgs	Solid	06/26/19 10:43	06/29/19 08:50	
490-176570-13	SB2-001 @ 10'bgs	Solid	06/26/19 10:44	06/29/19 08:50	
490-176570-14	SB2-001 @ 15'bgs	Solid	06/26/19 10:45	06/29/19 08:50	
490-176570-15	SB2-001 @ 20'bgs	Solid	06/26/19 10:46	06/29/19 08:50	
490-176570-16	SB3-001 @ 0-1'bgs	Solid	06/26/19 10:50	06/29/19 08:50	
490-176570-17	SB3-001 @ 5'bgs	Solid	06/26/19 10:51	06/29/19 08:50	
490-176570-18	SB3-001 @ 10'bgs	Solid	06/26/19 10:52	06/29/19 08:50	
490-176570-19	SB3-001 @ 15'bgs	Solid	06/26/19 10:53	06/29/19 08:50	
490-176570-20	SB3-001 @ 20'bgs	Solid	06/26/19 10:54	06/29/19 08:50	

Eurofins TestAmerica, Nashville

### **Case Narrative**

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Job ID: 490-176570-1

Laboratory: Eurofins TestAmerica, Nashville

Narrative

Job Narrative 490-176570-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/29/2019 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

#### **GC/MS VOA**

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-604929.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8015B: The method blank for 490-605571 contained Diesel Range Organics [C10-C28] and MRO (C28-C35) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Job ID: 490-176570-1

### Definitions/Glossary

Client: Sport Environmental Services LLC

Project/Site: XTO Energy SDG: NM C State NCT - 2 #010 (1RP-5027)

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#### **Qualifiers**

### **GC/MS VOA**

Qualifier Description

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**GC Semi VOA** 

B Compound was found in the blank and sample.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

Eurofins TestAmerica, Nashville

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 0-1'bgs

Date Collected: 06/26/19 10:14 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.00187	0.000627	mg/Kg		07/01/19 12:13	07/03/19 03:12	
Ethylbenzene	ND		0.00187	0.000627	mg/Kg		07/01/19 12:13	07/03/19 03:12	
Toluene	ND		0.00187	0.000693	mg/Kg		07/01/19 12:13	07/03/19 03:12	
Xylenes, Total	ND		0.00562	0.00115	mg/Kg		07/01/19 12:13	07/03/19 03:12	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				07/01/19 12:13	07/03/19 03:12	
4-Bromofluorobenzene (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 03:12	
Dibromofluoromethane (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 03:12	
Toluene-d8 (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 03:12	
Method: 8015B - Gasoline Range	e Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.24	2.12	mg/Kg		07/01/19 12:13	07/02/19 22:31	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	74		50 - 150				07/01/19 12:13	07/02/19 22:31	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		4.91	2.45	mg/Kg		07/08/19 16:41	07/10/19 19:10	
MRO (C28-C35)	3.60	JB	4.91	2.45	mg/Kg		07/08/19 16:41	07/10/19 19:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	92		50 - 150				07/08/19 16:41	07/10/19 19:10	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 5'bgs

Date Collected: 06/26/19 10:18 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00182	0.000609	mg/Kg		07/01/19 12:13	07/03/19 03:42	
Ethylbenzene	ND		0.00182	0.000609	mg/Kg		07/01/19 12:13	07/03/19 03:42	
Toluene	ND		0.00182	0.000673	mg/Kg		07/01/19 12:13	07/03/19 03:42	
Xylenes, Total	ND		0.00545	0.00112	mg/Kg		07/01/19 12:13	07/03/19 03:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				07/01/19 12:13	07/03/19 03:42	-
4-Bromofluorobenzene (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 03:42	
Dibromofluoromethane (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 03:42	
Toluene-d8 (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 03:42	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.52	2.26	mg/Kg		07/01/19 12:13	07/03/19 00:13	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	77		50 - 150				07/01/19 12:13	07/03/19 00:13	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.83	2.41	mg/Kg		07/08/19 16:41	07/10/19 19:28	
MRO (C28-C35)	3.10	JB	4.83	2.41	mg/Kg		07/08/19 16:41	07/10/19 19:28	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	100		50 - 150				07/08/19 16:41	07/10/19 19:28	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.95		mg/Kg			07/04/19 14:28	

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 10'bgs

Date Collected: 06/26/19 10:19 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000638	mg/Kg		07/01/19 12:13	07/03/19 04:11	1
Ethylbenzene	ND		0.00190	0.000638	mg/Kg		07/01/19 12:13	07/03/19 04:11	1
Toluene	ND		0.00190	0.000705	mg/Kg		07/01/19 12:13	07/03/19 04:11	1
Xylenes, Total	ND		0.00571	0.00117	mg/Kg		07/01/19 12:13	07/03/19 04:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				07/01/19 12:13	07/03/19 04:11	1
4-Bromofluorobenzene (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 04:11	1
Dibromofluoromethane (Surr)	96		70 - 130				07/01/19 12:13	07/03/19 04:11	1
Toluene-d8 (Surr)	95		70 - 130				07/01/19 12:13	07/03/19 04:11	1
Analyte Gasoline Range Organics [C6 - C10]	Result_ ND	Qualifier	4.83	2.41	Unit mg/Kg	D	<b>Prepared</b> 07/01/19 12:13	Analyzed 07/03/19 00:47	Dil Fac
Surrogate	%Recovery	O	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene		- Qualifier	50 - 150				07/01/19 12:13	07/03/19 00:47	
a,a,a-muorotolaene -	70		30 - 130				07701719 12.13	01703/19 00.41	,
Method: 8015B - Diesel Range O	•	•							
Analyte		Qualifier	RL_		Unit	D	Prepared	Analyzed	Dil Fac
	ND.		4.02	2.47	mg/Kg		07/08/19 16:41	07/10/19 19:46	1
Diesel Range Organics [C10-C28]	ND		4.93		0 0				
Diesel Range Organics [C10-C28] MRO (C28-C35)	2.92	J B	4.93		mg/Kg		07/08/19 16:41	07/10/19 19:46	1
MRO (C28-C35)					0 0		07/08/19 16:41  Prepared	07/10/19 19:46  Analyzed	Dil Fac
MRO (C28-C35) Surrogate	2.92		4.93		0 0				
MRO (C28-C35)  Surrogate o-Terphenyl (Surr)	2.92 %Recovery 88	Qualifier	4.93		0 0		Prepared	Analyzed	1 Dil Fac
MRO (C28-C35) Surrogate	2.92  %Recovery 88  omatography -	Qualifier	4.93	2.47	0 0	D	Prepared	Analyzed	

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 15'bgs

Date Collected: 06/26/19 10:20 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-4

Method: 8260B - Volatile Organic Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00182	0.000611	mg/Kg		07/01/19 12:13	07/03/19 04:41	1
Ethylbenzene	ND		0.00182	0.000611	mg/Kg		07/01/19 12:13	07/03/19 04:41	1
Toluene	ND		0.00182	0.000675	mg/Kg		07/01/19 12:13	07/03/19 04:41	1
Xylenes, Total	ND		0.00547	0.00112	mg/Kg		07/01/19 12:13	07/03/19 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 04:41	1
4-Bromofluorobenzene (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 04:41	1
Dibromofluoromethane (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 04:41	1
Toluene-d8 (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 04:41	1
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.73	2.36	mg/Kg		07/01/19 12:13	07/03/19 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150				07/01/19 12:13	07/03/19 01:21	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	-	4.93	2.47	mg/Kg		07/08/19 16:41	07/10/19 20:04	1
MRO (C28-C35)	2.99	JB	4.93	2.47	mg/Kg		07/08/19 16:41	07/10/19 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	100		50 - 150				07/08/19 16:41	07/10/19 20:04	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.6		10.1	7.40	mg/Kg			07/04/19 15:01	1

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 20'bgs

Date Collected: 06/26/19 10:21 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00179	0.000598	mg/Kg		07/01/19 12:13	07/03/19 05:11	1
Ethylbenzene	ND		0.00179	0.000598	mg/Kg		07/01/19 12:13	07/03/19 05:11	1
Toluene	ND		0.00179	0.000661	mg/Kg		07/01/19 12:13	07/03/19 05:11	1
Xylenes, Total	ND		0.00536	0.00110	mg/Kg		07/01/19 12:13	07/03/19 05:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 05:11	
4-Bromofluorobenzene (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 05:11	1
Dibromofluoromethane (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 05:11	1
Toluene-d8 (Surr)	97		70 - 130				07/01/19 12:13	07/03/19 05:11	1
- Method: 8015B - Gasoline Range	e Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.67	2.34	mg/Kg		07/01/19 12:13	07/03/19 01:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150				07/01/19 12:13	07/03/19 01:55	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.48	mg/Kg		07/08/19 16:41	07/10/19 20:22	1
MRO (C28-C35)	2.81	JB	4.95	2.48	mg/Kg		07/08/19 16:41	07/10/19 20:22	1
· /							Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits						
Surrogate		Qualifier	50 - 150				07/08/19 16:41	07/10/19 20:22	1
,		·					07/08/19 16:41	07/10/19 20:22	1
Surrogate o-Terphenyl (Surr)	88 omatography -	·		MDL	Unit	D	07/08/19 16:41 Prepared	07/10/19 20:22 Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 0-1'bgs

Date Collected: 06/26/19 10:34 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-6

Method: 8260B - Volatile Organic Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	Qualifier	0.00200	0.000669	mg/Kg		07/01/19 12:13	07/03/19 05:41	Dil Fac
Ethylbenzene	ND ND		0.00200	0.000669	mg/Kg		07/01/19 12:13	07/03/19 05:41	,
Toluene	ND ND		0.00200	0.000039	mg/Kg		07/01/19 12:13	07/03/19 05:41	1
Xylenes, Total	ND		0.00599	0.00123			07/01/19 12:13	07/03/19 05:41	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				07/01/19 12:13	07/03/19 05:41	
4-Bromofluorobenzene (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 05:41	1
Dibromofluoromethane (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 05:41	1
Toluene-d8 (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 05:41	
Analyte Gasoline Range Organics [C6 - C10]	Result	Qualifier	RL 4.71	MDL 2.35	Unit mg/Kg	D	Prepared 07/01/19 12:13	Analyzed 07/03/19 02:29	Dil Fac
					99				
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	74		50 - 150				07/01/19 12:13	07/03/19 02:29	1
Method: 8015B - Diesel Range Or	•					_			
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.99	2.50	mg/Kg		07/08/19 16:41	07/10/19 20:40	1
MRO (C28-C35)	ND		4.99	2.50	mg/Kg		07/08/19 16:41	07/10/19 20:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	91		50 - 150				07/08/19 16:41	07/10/19 20:40	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 5'bgs

Date Collected: 06/26/19 10:35 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00182	0.000611	mg/Kg		07/01/19 12:13	07/03/19 06:11	1
Ethylbenzene	ND		0.00182	0.000611	mg/Kg		07/01/19 12:13	07/03/19 06:11	1
Toluene	ND		0.00182	0.000675	mg/Kg		07/01/19 12:13	07/03/19 06:11	1
Xylenes, Total	ND		0.00547	0.00112	mg/Kg		07/01/19 12:13	07/03/19 06:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 06:11	1
4-Bromofluorobenzene (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 06:11	1
Dibromofluoromethane (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 06:11	1
Toluene-d8 (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 06:11	1
Method: 8015B - Gasoline Range	e Organics - (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.94	2.47	mg/Kg		07/01/19 12:13	07/03/19 03:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150				07/01/19 12:13	07/03/19 03:03	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.97	2.48	mg/Kg		07/08/19 16:41	07/10/19 20:59	1
MRO (C28-C35)	2.82	JB	4.97	2.48	mg/Kg		07/08/19 16:41	07/10/19 20:59	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
· ·			50 - 150				07/08/19 16:41	07/10/19 20:59	1
o-Terphenyl (Surr)	96		00 - 100						
o-Terphenyl (Surr)  Method: 300.0 - Anions, Ion Chro		Soluble	30 - 700						
	omatography -	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 10'bgs

Date Collected: 06/26/19 10:36 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000636	mg/Kg		07/01/19 12:13	07/03/19 06:41	1
Ethylbenzene	ND		0.00190	0.000636	mg/Kg		07/01/19 12:13	07/03/19 06:41	1
Toluene	ND		0.00190	0.000702	mg/Kg		07/01/19 12:13	07/03/19 06:41	1
Xylenes, Total	ND		0.00569	0.00117	mg/Kg		07/01/19 12:13	07/03/19 06:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				07/01/19 12:13	07/03/19 06:41	
4-Bromofluorobenzene (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 06:41	1
Dibromofluoromethane (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 06:41	1
Toluene-d8 (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 06:41	1
Method: 8015B - Gasoline Range	e Organics - (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.45	2.22	mg/Kg		07/01/19 12:13	07/03/19 03:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150				07/01/19 12:13	07/03/19 03:37	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.88	2.44	mg/Kg		07/08/19 17:20	07/10/19 22:06	1
	ND		4.88	2.44	mg/Kg		07/08/19 17:20	07/10/19 22:06	1
MRO (C28-C35)	ND								
,	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Surrogate		Qualifier	Limits 50 - 150				<b>Prepared</b> 07/08/19 17:20	<b>Analyzed</b> 07/10/19 22:06	Dil Fac
MRO (C28-C35)  Surrogate o-Terphenyl (Surr)  Method: 300.0 - Anions, Ion Chro		·							
Surrogate o-Terphenyl (Surr)		·		MDL	Unit	D			

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 15'bgs

Date Collected: 06/26/19 10:37 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-9

Method: 8260B - Volatile Organic Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.000662	mg/Kg		07/01/19 12:13	07/03/19 02:42	1
Ethylbenzene	ND		0.00198	0.000662	mg/Kg		07/01/19 12:13	07/03/19 02:42	1
Toluene	ND		0.00198	0.000731	mg/Kg		07/01/19 12:13	07/03/19 02:42	1
Xylenes, Total	ND		0.00593	0.00122	mg/Kg		07/01/19 12:13	07/03/19 02:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 02:42	1
4-Bromofluorobenzene (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 02:42	1
Dibromofluoromethane (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 02:42	1
Toluene-d8 (Surr)	105		70 - 130				07/01/19 12:13	07/03/19 02:42	1
Analyte Gasoline Range Organics [C6 - C10]	- Result ND	Qualifier	5.00	MDL 2.50	Unit mg/Kg	D	Prepared 07/01/19 12:13	<b>Analyzed</b> 07/03/19 04:11	Dil Fac
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77	Quanter	50 - 150				07/01/19 12:13	07/03/19 04:11	1
Method: 8015B - Diesel Range O		(GC) Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
	2.71		4.97	2.49	mg/Kg		07/08/19 17:20	07/10/19 23:35	DII Fac
Diesel Range Organics [C10-C28]		J	4.97				07/08/19 17:20	07/10/19 23:35	1
MRO (C28-C35)	3.27	J	4.97	2.49	mg/Kg		07/08/19 17.20	07/10/19 23.35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		50 - 150				07/08/19 17:20	07/10/19 23:35	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			10.1	7.05	mg/Kg			07/08/19 17:34	1

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 20'bgs

Date Collected: 06/26/19 10:38 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000637	mg/Kg		07/01/19 12:13	07/03/19 07:11	1
Ethylbenzene	ND		0.00190	0.000637	mg/Kg		07/01/19 12:13	07/03/19 07:11	1
Toluene	ND		0.00190	0.000703	mg/Kg		07/01/19 12:13	07/03/19 07:11	1
Xylenes, Total	ND		0.00570	0.00117	mg/Kg		07/01/19 12:13	07/03/19 07:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 07:11	
4-Bromofluorobenzene (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 07:11	1
Dibromofluoromethane (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 07:11	1
Toluene-d8 (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 07:11	1
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.60	2.30	mg/Kg		07/01/19 12:13	07/03/19 04:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150				07/01/19 12:13	07/03/19 04:45	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.86	2.43	mg/Kg		07/08/19 17:20	07/10/19 23:53	1
MRO (C28-C35)	ND		4.86	2.43	mg/Kg		07/08/19 17:20	07/10/19 23:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	74		50 - 150				07/08/19 17:20	07/10/19 23:53	
•									
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB2-001 @ 0-1'bgs

Date Collected: 06/26/19 10:42 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-11

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00186	0.000623	mg/Kg		07/01/19 12:13	07/03/19 07:41	1
Ethylbenzene	ND		0.00186	0.000623	mg/Kg		07/01/19 12:13	07/03/19 07:41	1
Toluene	ND		0.00186	0.000688	mg/Kg		07/01/19 12:13	07/03/19 07:41	1
Xylenes, Total	ND		0.00558	0.00114	mg/Kg		07/01/19 12:13	07/03/19 07:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				07/01/19 12:13	07/03/19 07:41	
4-Bromofluorobenzene (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 07:41	1
Dibromofluoromethane (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 07:41	1
Toluene-d8 (Surr)	104		70 - 130				07/01/19 12:13	07/03/19 07:41	1
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.19	2.10	mg/Kg		07/01/19 12:13	07/03/19 05:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150				07/01/19 12:13	07/03/19 05:19	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.99	2.50	mg/Kg		07/08/19 17:20	07/11/19 00:11	1
MRO (C28-C35)	5.10		4.99	2.50	mg/Kg		07/08/19 17:20	07/11/19 00:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	87		50 - 150				07/08/19 17:20	07/11/19 00:11	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0		mg/Kg			07/08/19 18:07	

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB2-001 @ 5'bgs

Date Collected: 06/26/19 10:43 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-12

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00199	0.000667	mg/Kg		07/01/19 12:13	07/03/19 08:11	1
Ethylbenzene	ND		0.00199	0.000667	mg/Kg		07/01/19 12:13	07/03/19 08:11	1
Toluene	ND		0.00199	0.000737	mg/Kg		07/01/19 12:13	07/03/19 08:11	1
Xylenes, Total	ND		0.00598	0.00123	mg/Kg		07/01/19 12:13	07/03/19 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				07/01/19 12:13	07/03/19 08:11	1
4-Bromofluorobenzene (Surr)	105		70 - 130				07/01/19 12:13	07/03/19 08:11	1
Dibromofluoromethane (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 08:11	1
Toluene-d8 (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 08:11	1
Method: 8015B - Gasoline Range	o Organics - (G	C)							
Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.47	2.24	mg/Kg		07/01/19 12:13	07/03/19 05:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150				07/01/19 12:13	07/03/19 05:54	1
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.27		4.92	2.46	mg/Kg		07/08/19 17:20	07/11/19 00:29	1
MRO (C28-C35)	10.2		4.92	2.46	mg/Kg		07/08/19 17:20	07/11/19 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	92		50 - 150				07/08/19 17:20	07/11/19 00:29	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte	0 . ,	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB2-001 @ 10'bgs

Date Collected: 06/26/19 10:44 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000637	mg/Kg		07/01/19 12:13	07/03/19 08:41	1
Ethylbenzene	ND		0.00190	0.000637	mg/Kg		07/01/19 12:13	07/03/19 08:41	1
Toluene	ND		0.00190	0.000703	mg/Kg		07/01/19 12:13	07/03/19 08:41	1
Xylenes, Total	ND		0.00570	0.00117	mg/Kg		07/01/19 12:13	07/03/19 08:41	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				07/01/19 12:13	07/03/19 08:41	-
4-Bromofluorobenzene (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 08:41	
Dibromofluoromethane (Surr)	105		70 - 130				07/01/19 12:13	07/03/19 08:41	1
Toluene-d8 (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 08:41	
- Method: 8015B - Gasoline Range	e Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.50	2.25	mg/Kg		07/01/19 12:13	07/03/19 06:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	74		50 - 150				07/01/19 12:13	07/03/19 06:28	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.85	2.43	mg/Kg		07/08/19 17:20	07/11/19 00:47	
MRO (C28-C35)	ND		4.85	2.43	mg/Kg		07/08/19 17:20	07/11/19 00:47	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
	83		50 - 150				07/08/19 17:20	07/11/19 00:47	1
o-Terphenyl (Surr)									
	omatography -	Soluble							
o-Terphenyl (Surr)  Method: 300.0 - Anions, Ion Chro Analyte	0	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB2-001 @ 15'bgs

Date Collected: 06/26/19 10:45 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000657	mg/Kg		07/01/19 12:13	07/03/19 09:11	1
Ethylbenzene	ND		0.00196	0.000657	mg/Kg		07/01/19 12:13	07/03/19 09:11	1
Toluene	ND		0.00196	0.000725	mg/Kg		07/01/19 12:13	07/03/19 09:11	1
Xylenes, Total	ND		0.00588	0.00121	mg/Kg		07/01/19 12:13	07/03/19 09:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130				07/01/19 12:13	07/03/19 09:11	
4-Bromofluorobenzene (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 09:11	1
Dibromofluoromethane (Surr)	102		70 - 130				07/01/19 12:13	07/03/19 09:11	1
Toluene-d8 (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 09:11	1
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.80	2.40	mg/Kg		07/01/19 12:13	07/03/19 07:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150				07/01/19 12:13	07/03/19 07:02	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		07/08/19 17:20	07/11/19 01:04	1
MRO (C28-C35)	ND		4.92	2.46	mg/Kg		07/08/19 17:20	07/11/19 01:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		50 - 150				07/08/19 17:20	07/11/19 01:04	1
. , , ,									
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Method: 300.0 - Anions, Ion Chro		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB2-001 @ 20'bgs

Date Collected: 06/26/19 10:46 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00179	0.000598	mg/Kg		07/01/19 12:13	07/03/19 09:41	
Ethylbenzene	ND		0.00179	0.000598	mg/Kg		07/01/19 12:13	07/03/19 09:41	•
Toluene	ND		0.00179	0.000661	mg/Kg		07/01/19 12:13	07/03/19 09:41	•
Xylenes, Total	ND		0.00536	0.00110	mg/Kg		07/01/19 12:13	07/03/19 09:41	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				07/01/19 12:13	07/03/19 09:41	
4-Bromofluorobenzene (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 09:41	
Dibromofluoromethane (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 09:41	
Toluene-d8 (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 09:41	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.94	2.47	mg/Kg		07/01/19 12:13	07/03/19 07:36	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	78		50 - 150				07/01/19 12:13	07/03/19 07:36	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	• ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.48	mg/Kg		07/08/19 17:20	07/11/19 01:22	
MRO (C28-C35)	ND		4.95	2.48	mg/Kg		07/08/19 17:20	07/11/19 01:22	,
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Surrogate		_	50 - 150				07/08/19 17:20	07/11/19 01:22	
	93		00 - 100						
o-Terphenyl (Surr)		Soluble	00 - 700						
o-Terphenyl (Surr)  Method: 300.0 - Anions, Ion Chro	omatography -	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 0-1'bgs

Date Collected: 06/26/19 10:50

Lab Sample ID: 490-176570-16

Method: 8260B - Volatile Organio Analyte	•	(GC/MS) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00178	0.000597	mg/Kg		07/01/19 12:13	07/03/19 03:40	
Ethylbenzene	ND		0.00178	0.000597	mg/Kg		07/01/19 12:13	07/03/19 03:40	
Toluene	0.00102	J	0.00189	0.000699	mg/Kg		07/03/19 12:58	07/03/19 15:51	1
Xylenes, Total	ND		0.00535	0.00110	mg/Kg		07/01/19 12:13	07/03/19 03:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130				07/01/19 12:13	07/03/19 03:40	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130				07/03/19 12:58	07/03/19 15:51	1
4-Bromofluorobenzene (Surr)	104		70 - 130				07/01/19 12:13	07/03/19 03:40	1
4-Bromofluorobenzene (Surr)	107		70 - 130				07/03/19 12:58	07/03/19 15:51	1
Dibromofluoromethane (Surr)	99		70 - 130				07/01/19 12:13	07/03/19 03:40	1
Dibromofluoromethane (Surr)	102		70 - 130				07/03/19 12:58	07/03/19 15:51	1
Toluene-d8 (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 03:40	1
Toluene-d8 (Surr)	106		70 - 130				07/03/19 12:58	07/03/19 15:51	1
Method: 8015B - Gasoline Range	e Organics - (G	C)							
Method: 8015B - Gasoline Range Analyte Gasoline Range Organics [C6 - C10]	•	C) Qualifier	RL 4.71	MDL 2.35	Unit mg/Kg	D	Prepared 07/01/19 12:13	Analyzed 07/03/19 08:10	Dil Fac
Analyte	Result	Qualifier				<u>D</u>			
Analyte Gasoline Range Organics [C6 - C10]	Result ND	Qualifier	4.71			<u>D</u>	07/01/19 12:13	07/03/19 08:10	1
Analyte Gasoline Range Organics [C6 - C10]  Surrogate	Result ND %Recovery 75	Qualifier  Qualifier	4.71			<u> </u>	07/01/19 12:13  Prepared	07/03/19 08:10  Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene	Result ND  %Recovery 75  rganics (DRO)	Qualifier  Qualifier	4.71  Limits  50 - 150	2.35		<u>D</u>	07/01/19 12:13  Prepared	07/03/19 08:10  Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O	Result ND  %Recovery 75  rganics (DRO)	Qualifier  Qualifier  (GC)	4.71  Limits  50 - 150	2.35	mg/Kg		07/01/19 12:13  Prepared  07/01/19 12:13	07/03/19 08:10  Analyzed  07/03/19 08:10	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O Analyte	Result ND  %Recovery 75  rganics (DRO) Result	Qualifier  Qualifier  (GC)	4.71  Limits  50 - 150	2.35 MDL 2.47	mg/Kg		07/01/19 12:13  Prepared  07/01/19 12:13  Prepared	07/03/19 08:10  Analyzed  07/03/19 08:10  Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] MRO (C28-C35)  Surrogate	Result ND  %Recovery 75  rganics (DRO) Result 5.70 17.6  %Recovery	Qualifier  Qualifier  (GC) Qualifier	4.71  Limits  50 - 150  RL  4.93  4.93  Limits	2.35 MDL 2.47	mg/Kg  Unit mg/Kg		07/01/19 12:13  Prepared  07/01/19 12:13  Prepared  07/08/19 17:20  07/08/19 17:20  Prepared	07/03/19 08:10  Analyzed  07/03/19 08:10  Analyzed  07/11/19 01:40  07/11/19 01:40  Analyzed	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] MRO (C28-C35)	Result   ND	Qualifier  Qualifier  (GC) Qualifier	4.71  Limits  50 - 150  RL  4.93 4.93	2.35 MDL 2.47	mg/Kg  Unit mg/Kg		07/01/19 12:13  Prepared  07/01/19 12:13  Prepared  07/08/19 17:20  07/08/19 17:20	07/03/19 08:10  Analyzed  07/03/19 08:10  Analyzed  07/11/19 01:40  07/11/19 01:40	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28] MRO (C28-C35)  Surrogate o-Terphenyl (Surr)  Method: 300.0 - Anions, Ion Chro	Result ND  %Recovery 75  rganics (DRO) Result 5.70 17.6  %Recovery 91  omatography -	Qualifier  Qualifier  (GC) Qualifier  Qualifier	4.71  Limits  50 - 150  RL  4.93  4.93  Limits  50 - 150	2.35 MDL 2.47 2.47	mg/Kg  Unit mg/Kg mg/Kg	D_	07/01/19 12:13  Prepared  07/01/19 12:13  Prepared  07/08/19 17:20  07/08/19 17:20  Prepared  07/08/19 17:20	07/03/19 08:10  Analyzed 07/03/19 08:10  Analyzed 07/11/19 01:40 07/11/19 01:40  Analyzed 07/11/19 01:40	Dil Fac
Analyte Gasoline Range Organics [C6 - C10]  Surrogate a,a,a-Trifluorotoluene  Method: 8015B - Diesel Range O Analyte Diesel Range Organics [C10-C28]  MRO (C28-C35)  Surrogate b-Terphenyl (Surr)	Result ND  %Recovery 75  rganics (DRO) Result 5.70 17.6  %Recovery 91  omatography -	Qualifier  Qualifier  (GC) Qualifier  Qualifier	4.71  Limits  50 - 150  RL  4.93  4.93  Limits	2.35 MDL 2.47 2.47	mg/Kg  Unit mg/Kg		07/01/19 12:13  Prepared  07/01/19 12:13  Prepared  07/08/19 17:20  07/08/19 17:20  Prepared	07/03/19 08:10  Analyzed  07/03/19 08:10  Analyzed  07/11/19 01:40  07/11/19 01:40  Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 5'bgs

Date Collected: 06/26/19 10:51 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-17

Method: 8260B - Volatile Organic Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00175	0.000585	mg/Kg		07/01/19 12:13	07/03/19 04:09	
Ethylbenzene	ND		0.00175	0.000585	mg/Kg		07/01/19 12:13	07/03/19 04:09	
Toluene	ND		0.00175	0.000646	mg/Kg		07/01/19 12:13	07/03/19 04:09	
Xylenes, Total	ND		0.00524	0.00107	mg/Kg		07/01/19 12:13	07/03/19 04:09	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	90		70 _ 130				07/01/19 12:13	07/03/19 04:09	
4-Bromofluorobenzene (Surr)	97		70 - 130				07/01/19 12:13	07/03/19 04:09	
Dibromofluoromethane (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 04:09	
Toluene-d8 (Surr)	92		70 - 130				07/01/19 12:13	07/03/19 04:09	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.39	2.20	mg/Kg		07/01/19 12:13	07/03/19 08:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	75		50 - 150				07/01/19 12:13	07/03/19 08:44	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.88	2.44	mg/Kg		07/08/19 17:20	07/11/19 01:58	
MRO (C28-C35)	3.21	J	4.88	2.44	mg/Kg		07/08/19 17:20	07/11/19 01:58	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	81		50 - 150				07/08/19 17:20	07/11/19 01:58	
•		Colubia							
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 10'bgs

Date Collected: 06/26/19 10:52 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-18

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00182	0.000609	mg/Kg		07/01/19 12:13	07/03/19 04:38	
Ethylbenzene	ND		0.00182	0.000609	mg/Kg		07/01/19 12:13	07/03/19 04:38	
Toluene	ND		0.00182	0.000673	mg/Kg		07/01/19 12:13	07/03/19 04:38	•
Xylenes, Total	ND		0.00545	0.00112	mg/Kg		07/01/19 12:13	07/03/19 04:38	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				07/01/19 12:13	07/03/19 04:38	
4-Bromofluorobenzene (Surr)	100		70 - 130				07/01/19 12:13	07/03/19 04:38	
Dibromofluoromethane (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 04:38	
Toluene-d8 (Surr)	96		70 - 130				07/01/19 12:13	07/03/19 04:38	
Method: 8015B - Gasoline Rang	•	•				_			
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.82	2.41	mg/Kg		07/01/19 12:13	07/03/19 09:18	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	75		50 - 150				07/01/19 12:13	07/03/19 09:18	
Method: 8015B - Diesel Range O	Organics (DRO)	(GC)							
	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte	Result								
•	ND		4.95	2.48	mg/Kg		07/08/19 17:20	07/11/19 02:16	-
Diesel Range Organics [C10-C28]				2.48	mg/Kg mg/Kg	<u> </u>	07/08/19 17:20 07/08/19 17:20	07/11/19 02:16 07/11/19 02:16	
Analyte Diesel Range Organics [C10-C28] MRO (C28-C35) Surrogate	ND	J	4.95	2.48	0 0				Dil Fac
Diesel Range Organics [C10-C28]  MRO (C28-C35)  Surrogate	ND 2.76	J	4.95 4.95	2.48	0 0		07/08/19 17:20	07/11/19 02:16	
Diesel Range Organics [C10-C28]  MRO (C28-C35)  Surrogate o-Terphenyl (Surr)	%Recovery 75	J Qualifier	4.95 4.95 <i>Limits</i>	2.48	0 0		07/08/19 17:20  Prepared	07/11/19 02:16  Analyzed	Dil Fac
Diesel Range Organics [C10-C28]  MRO (C28-C35)	ND 2.76  %Recovery 75  omatography -	J Qualifier	4.95 4.95 <i>Limits</i>	2.48	mg/Kg		07/08/19 17:20  Prepared	07/11/19 02:16  Analyzed	

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 15'bgs

Date Collected: 06/26/19 10:53 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-19

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00192	0.000643	mg/Kg		07/01/19 12:13	07/03/19 05:07	1
Ethylbenzene	ND		0.00192	0.000643	mg/Kg		07/01/19 12:13	07/03/19 05:07	1
Toluene	ND		0.00192	0.000710	mg/Kg		07/01/19 12:13	07/03/19 05:07	1
Xylenes, Total	ND		0.00576	0.00118	mg/Kg		07/01/19 12:13	07/03/19 05:07	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 130				07/01/19 12:13	07/03/19 05:07	
4-Bromofluorobenzene (Surr)	103		70 - 130				07/01/19 12:13	07/03/19 05:07	1
Dibromofluoromethane (Surr)	98		70 - 130				07/01/19 12:13	07/03/19 05:07	1
Toluene-d8 (Surr)	95		70 - 130				07/01/19 12:13	07/03/19 05:07	1
Surrogate	%Recovery	Qualifier	l imits				Prenared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		4.80	2.40	mg/Kg		07/01/19 12:13	07/03/19 09:52	
Surrogate a,a,a-Trifluorotoluene	- %Recovery - 76	Qualifier	Limits 50 - 150				<b>Prepared</b> 07/01/19 12:13	Analyzed 07/03/19 09:52	Dil Fa
a,a,a-11111u010t0tuerie -	70		30 - 730				07/01/19 12.13	07/03/19 09.52	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
	• ,	(GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	• ,	· /	RL 5.00	MDL 2.50	Unit mg/Kg	<u>D</u>	Prepared 07/08/19 17:20	Analyzed 07/11/19 02:33	
Method: 8015B - Diesel Range Or Analyte Diesel Range Organics [C10-C28] MRO (C28-C35)	Result	Qualifier		2.50		<u>D</u>			
Analyte Diesel Range Organics [C10-C28]	Result	Qualifier J	5.00	2.50	mg/Kg	<u>D</u>	07/08/19 17:20	07/11/19 02:33	
Analyte Diesel Range Organics [C10-C28] MRO (C28-C35) Surrogate	Result ND 3.09	Qualifier J	5.00 5.00	2.50	mg/Kg	<u>D</u>	07/08/19 17:20 07/08/19 17:20	07/11/19 02:33 07/11/19 02:33	Dil Fa
Analyte  Diesel Range Organics [C10-C28]  MRO (C28-C35)	Result ND 3.09 %Recovery 74	Qualifier  J  Qualifier	5.00 5.00 <b>Limits</b>	2.50	mg/Kg	<u>D</u>	07/08/19 17:20 07/08/19 17:20 <b>Prepared</b>	07/11/19 02:33 07/11/19 02:33 <i>Analyzed</i>	Dil Fac
Analyte Diesel Range Organics [C10-C28] MRO (C28-C35) Surrogate o-Terphenyl (Surr)	Result ND 3.09  %Recovery 74  pmatography -	Qualifier  J  Qualifier	5.00 5.00 <b>Limits</b>	2.50	mg/Kg mg/Kg	D	07/08/19 17:20 07/08/19 17:20 <b>Prepared</b>	07/11/19 02:33 07/11/19 02:33 <i>Analyzed</i>	Dil Fac

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 20'bgs

Date Collected: 06/26/19 10:54 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-20

Method: 8260B - Volatile Organic Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000669	mg/Kg		07/01/19 12:13	07/03/19 05:35	
Ethylbenzene	ND		0.00200	0.000669	mg/Kg		07/01/19 12:13	07/03/19 05:35	
Toluene	ND		0.00200	0.000739	mg/Kg		07/01/19 12:13	07/03/19 05:35	•
Xylenes, Total	ND		0.00599	0.00123	mg/Kg		07/01/19 12:13	07/03/19 05:35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				07/01/19 12:13	07/03/19 05:35	-
4-Bromofluorobenzene (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 05:35	-
Dibromofluoromethane (Surr)	101		70 - 130				07/01/19 12:13	07/03/19 05:35	
Toluene-d8 (Surr)	97		70 - 130				07/01/19 12:13	07/03/19 05:35	
Method: 8015B - Gasoline Range	Organics - (G	C)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.60	2.30	mg/Kg		07/01/19 12:13	07/03/19 10:26	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	77		50 - 150				07/01/19 12:13	07/03/19 10:26	
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	-	4.91	2.46	mg/Kg		07/08/19 17:20	07/11/19 02:51	
MRO (C28-C35)	ND		4.91	2.46	mg/Kg		07/08/19 17:20	07/11/19 02:51	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	75		50 - 150				07/08/19 17:20	07/11/19 02:51	•
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

### **QC Sample Results**

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-176570-9 MS

**Matrix: Solid** 

Analysis Batch: 604853

Client Sample ID: SB1-002 @ 15'bgs **Prep Type: Total/NA** 

**Prep Batch: 604587** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		0.0468	0.03624		mg/Kg		77	21 - 150	
Ethylbenzene	ND		0.0468	0.03611		mg/Kg		77	10 - 150	
Toluene	ND		0.0468	0.03895		mg/Kg		83	17 _ 150	
Xylenes, Total	ND		0.0936	0.06985		mg/Kg		75	10 - 150	
	MC	MC								

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	107		70 - 130

Client Sample ID: SB1-002 @ 15'bgs

Prep Type: Total/NA

**Prep Batch: 604587** 

Lab Sample ID: 490-176570-9 MSD **Matrix: Solid** Analysis Batch: 604853

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.0479	0.03746		mg/Kg		78	21 - 150	3	50
Ethylbenzene	ND		0.0479	0.04003		mg/Kg		84	10 - 150	10	50
Toluene	ND		0.0479	0.04130		mg/Kg		86	17 - 150	6	50
Xylenes, Total	ND		0.0958	0.07446		mg/Kg		78	10 - 150	6	50

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130
Toluene-d8 (Surr)	107		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 604848

**Matrix: Solid** 

Lab Sample ID: MB 490-604848/6

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			07/02/19 21:56	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			07/02/19 21:56	1
Toluene	ND		0.00200	0.000740	mg/Kg			07/02/19 21:56	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			07/02/19 21:56	1

MR MR

	1112						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		07/02/19 21:56	1	
4-Bromofluorobenzene (Surr)	97		70 - 130		07/02/19 21:56	1	
Dibromofluoromethane (Surr)	101		70 - 130		07/02/19 21:56	1	
Toluene-d8 (Surr)	96		70 - 130		07/02/19 21:56	1	

Eurofins TestAmerica, Nashville

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-604848/3

**Matrix: Solid** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Analysis Batch: 604848

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05181		mg/Kg		104	70 - 130	
Ethylbenzene	0.0500	0.05403		mg/Kg		108	70 - 130	
Toluene	0.0500	0.05410		mg/Kg		108	70 - 130	
Xylenes, Total	0.100	0.1093		mg/Kg		109	70 - 130	
	Benzene Ethylbenzene Toluene	Analyte         Added           Benzene         0.0500           Ethylbenzene         0.0500           Toluene         0.0500	Analyte         Added         Result           Benzene         0.0500         0.05181           Ethylbenzene         0.0500         0.05403           Toluene         0.0500         0.05410	Analyte         Added         Result Qualifier           Benzene         0.0500         0.05181           Ethylbenzene         0.0500         0.05403           Toluene         0.0500         0.05410	Analyte         Added         Result on the part of the part	Analyte         Added         Result Qualifier         Unit         D           Benzene         0.0500         0.05181         mg/Kg           Ethylbenzene         0.0500         0.05403         mg/Kg           Toluene         0.0500         0.05410         mg/Kg	Analyte         Added         Result Qualifier         Unit         D         %Rec           Benzene         0.0500         0.05181         mg/Kg         104           Ethylbenzene         0.0500         0.05403         mg/Kg         108           Toluene         0.0500         0.05410         mg/Kg         108	Analyte         Added Benut Published         Qualifier Qualifier         Unit Unit Unit Unit Published         D %Rec Published         Limits           Benzene         0.0500         0.05181         mg/Kg         104         70 - 130           Ethylbenzene         0.0500         0.05403         mg/Kg         108         70 - 130           Toluene         0.0500         0.05410         mg/Kg         108         70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

70 - 130

110

Analysis Batch: 604848

**Matrix: Solid** 

Xylenes, Total

Lab Sample ID: LCSD 490-604848/4

LCSD LCSD RPD Spike %Rec. Added Analyte Result Qualifier Unit %Rec Limits **RPD** Limit Benzene 0.0500 0.05217 104 70 - 130 37 mg/Kg Ethylbenzene 0.0500 0.05442 mg/Kg 109 70 - 130 38 Toluene 0.0500 0.05401 mg/Kg 108 70 - 130 40

0.1097

mg/Kg

0.100

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

38

Analysis Batch: 604853

**Matrix: Solid** 

Lab Sample ID: MB 490-604853/6

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			07/03/19 02:12	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			07/03/19 02:12	1
Toluene	ND		0.00200	0.000740	mg/Kg			07/03/19 02:12	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			07/03/19 02:12	1

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		07/03/19 02:12	1	
4-Bromofluorobenzene (Surr)	99		70 - 130		07/03/19 02:12	1	
Dibromofluoromethane (Surr)	98		70 - 130		07/03/19 02:12	1	
Toluene-d8 (Surr)	101		70 - 130		07/03/19 02:12	1	

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### QC Sample Results

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-604853/4

**Matrix: Solid** 

Analysis Batch: 604853

Client Sample ID: Lab Control Sample Prep Type: Total/NA

LCS LCS %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.0500 0.04494 mg/Kg 90 Ethylbenzene 0.0500 0.04325 mg/Kg 86 70 - 130 Toluene 0.0500 0.04715 mg/Kg 94 70 - 130 Xylenes, Total 0.100 0.08922 mg/Kg 89 70 - 130

LCS LCS Surrogate %Recovery Qualifier Limits 84 70 - 130 1,2-Dichloroethane-d4 (Surr) 4-Bromofluorobenzene (Surr) 100 70 - 130 Dibromofluoromethane (Surr) 96 70 - 130 Toluene-d8 (Surr) 108 70 - 130

Lab Sample ID: MB 490-604929/7 Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 604929

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene ND 0.00200 0.000670 mg/Kg 07/03/19 14:20 Ethylbenzene ND 0.00200 0.000670 mg/Kg 07/03/19 14:20 Toluene ND 0.00200 0.000740 mg/Kg 07/03/19 14:20 ND 0.00600 07/03/19 14:20 0.00123 mg/Kg Xylenes, Total

Lab Sample ID: LCS 490-604929/3 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 604929

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.04539		mg/Kg		91	70 - 130	
Ethylbenzene	0.0500	0.04371		mg/Kg		87	70 - 130	
Toluene	0.0500	0.04562		mg/Kg		91	70 - 130	
Xylenes, Total	0.100	0.08448		mg/Kg		84	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 490-604929/4

**Matrix: Solid** 

Analyte Benzene Ethylbenzene Toluene Xylenes, Total

Analysis Batch: 604929

Client Sample ID: Lab	<b>Control Sample Dup</b>
	Pren Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
 	0.0500	0.04479		mg/Kg		90	70 - 130		37	
	0.0500	0.04462		mg/Kg		89	70 - 130	2	38	
	0.0500	0.04803		mg/Kg		96	70 - 130	5	40	
	0.100	0.08750		mg/Kg		88	70 - 130	4	38	

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Prep Type: Total/NA

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### QC Sample Results

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-604929/4

**Matrix: Solid** 

Analysis Batch: 604929

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	94		70 - 130
Toluene-d8 (Surr)	106		70 - 130

#### Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-604585/1-A

**Matrix: Solid** 

Analysis Batch: 604677

Client Sample ID: Method Blank Prep Type: Total/NA

**Prep Batch: 604585** 

Prep Type: Total/NA

Prep Batch: 604585

MB MB

Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Gasoline Range Organics [C6 - C10]  $\overline{\mathsf{ND}}$ 5.00 2.50 mg/Kg 07/01/19 12:11 07/02/19 21:56

MB MB

Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed a,a,a-Trifluorotoluene 07/01/19 12:11 07/02/19 21:56 75 50 150

Lab Sample ID: LCS 490-604585/2-A

**Matrix: Solid** 

Analysis Batch: 604677

Spike LCS LCS %Rec.

Added Qualifier Limits Analyte Result Unit D %Rec 500 505.6 Gasoline Range Organics [C6 mg/Kg 101 70 - 130

C10]

LCS LCS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene 50 - 150 89

Lab Sample ID: LCSD 490-604585/3-A

**Matrix: Solid** 

**Analysis Batch: 604677** 

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample

Prep Batch: 604585

RPD

Analyte hahhA Result Qualifier Unit D %Rec I imits RPD Limit Gasoline Range Organics [C6 -500 518.6 mg/Kg 104 70 - 130 21

Spike

LCSD LCSD

MS MS

C10]

LCSD LCSD

Sample Sample

%Recovery Surrogate Qualifier Limits 50 - 150 a,a,a-Trifluorotoluene 90

Lab Sample ID: 490-176570-1 MS

**Matrix: Solid** 

Analysis Batch: 604677

Client Sample ID: BG-001 @ 0-1'bgs

Prep Type: Total/NA

Prep Batch: 604585

%Rec. Limits

Result Qualifier Added Analyte Result Qualifier Unit %Rec ND 424 415.0 98 56 - 130 Gasoline Range Organics [C6 mg/Kg

Spike

C10]

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Prep Type: Total/NA

%Rec.

**Prep Batch: 604585** 

Prep Type: Total/NA

### QC Sample Results

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 490-176570-1 MS Client Sample ID: BG-001 @ 0-1'bgs **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 604677

MS MS

Surrogate %Recovery Qualifier

Limits a,a,a-Trifluorotoluene 50 - 150 88

Lab Sample ID: 490-176570-1 MSD Client Sample ID: BG-001 @ 0-1'bgs

**Matrix: Solid** 

Analysis Batch: 604677

Prep Batch: 604585 Sample Sample Spike MSD MSD %Rec. RPD RPD Limit Result Qualifier Added Result Qualifier %Rec Limits Analyte Unit D ND 424 381.5 90 56 - 130 21 Gasoline Range Organics [C6 mg/Kg

C10]

MSD MSD

Surrogate %Recovery Qualifier Limits 50 - 150 a,a,a-Trifluorotoluene 86

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 490-605571/1-A

**Matrix: Solid** 

Analysis Batch: 605873

мв мв Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte Diesel Range Organics [C10-C28] 2.543 J 5.00 2.50 mg/Kg 07/08/19 16:41 07/10/19 13:21 MRO (C28-C35) 2.791 J 5.00 2.50 mg/Kg 07/08/19 16:41 07/10/19 13:21

MB MB

Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 50 - 150 07/08/19 16:41 07/10/19 13:21 o-Terphenyl (Surr) 107

Lab Sample ID: LCS 490-605571/2-A

**Matrix: Solid** 

Analysis Batch: 605873

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits

40.0 41.86 mg/Kg 105 54 - 130 Diesel Range Organics

[C10-C28]

LCS LCS %Recovery Qualifier Surrogate Limits o-Terphenyl (Surr) 95 50 - 150

Lab Sample ID: 490-176569-A-8-F MS

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**Matrix: Solid** 

Analysis Batch: 605873

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits JB 40.0 Diesel Range Organics 2.81 32.94 mg/Kg 75 10 \_ 142

[C10-C28]

MS MS

%Recovery Qualifier I imits Surrogate o-Terphenyl (Surr) 68 50 - 150

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Client Sample ID: Lab Control Sample Prep Type: Total/NA

**Prep Batch: 605571** 

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 605571** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA **Prep Batch: 605571** 

### QC Sample Results

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 490-176569-A-8-G MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 605873

Prep Type: Total/NA Prep Batch: 605571 %Rec. RPD

Sample Sample Spike MSD MSD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit JΒ 39.6 86 47 Diesel Range Organics 2.81 36.95 mg/Kg 10 \_ 142 11

[C10-C28]

MSD MSD Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 76 50 - 150

Lab Sample ID: MB 490-605574/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

Prep Type: Total/NA

**Analysis Batch: 605868** Prep Batch: 605574 MB MB

Result Qualifier RL MDL Unit D Dil Fac Analyte Prepared Analyzed Diesel Range Organics [C10-C28] ND 5.00 2.50 mg/Kg 07/08/19 17:20 07/10/19 21:30 MRO (C28-C35) ND 5.00 2.50 mg/Kg 07/08/19 17:20 07/10/19 21:30

MB MB

Qualifier Surrogate %Recovery Limits Prepared Dil Fac Analyzed 50 - 150 07/08/19 17:20 o-Terphenyl (Surr) 90 07/10/19 21:30

Lab Sample ID: LCS 490-605574/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 605868

Prep Batch: 605574 LCS LCS Spike %Rec.

Added Analyte Result Qualifier Unit D %Rec Limits 40.0 40.69 mg/Kg 102 54 - 130 **Diesel Range Organics** 

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier I imits o-Terphenyl (Surr) 91 50 - 150

Lab Sample ID: 490-176570-8 MS Client Sample ID: SB1-002 @ 10'bgs

**Matrix: Solid** 

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Prep Type: Total/NA Analysis Batch: 605868 **Prep Batch: 605574** Sample Sample Spike MS MS

Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits ND 39.3 42.08 107 10 - 142 **Diesel Range Organics** mg/Kg

[C10-C28]

MS MS Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 91 50 - 150

Lab Sample ID: 490-176570-8 MSD Client Sample ID: SB1-002 @ 10'bgs

**Matrix: Solid** 

Analysis Batch: 605868 Prep Batch: 605574 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit ND 38.5 41.01 107 Diesel Range Organics mg/Kg 10 - 142

[C10-C28]

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%Rec.

Prep Type: Total/NA

**Prep Batch: 605574** 

### QC Sample Results

Client: Sport Environmental Services LLC

Job ID: 490-176570-1 Project/Site: XTO Energy SDG: NM C State NCT - 2 #010 (1RP-5027)

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 490-176570-8 MSD Client Sample ID: SB1-002 @ 10'bgs **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 605868

MSD MSD

Surrogate %Recovery Qualifier Limits 50 - 150 o-Terphenyl (Surr) 92

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 490-605001/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 605114

мв мв Qualifier Analyte Result RL

MDL Unit Prepared Analyzed Dil Fac Chloride ND 9.94 6.96 mg/Kg 07/04/19 08:24

Lab Sample ID: LCS 490-605001/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 605114

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit Limits D %Rec 100 97.75 Chloride 98 90 - 110 mg/Kg

Lab Sample ID: LCSD 490-605001/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 605114

LCSD LCSD RPD Spike %Rec. Analyte babbA Result Qualifier RPD Limit Unit D %Rec Limits Chloride 100 99.76 mg/Kg

Lab Sample ID: 490-176475-E-19-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 605114

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride ND 98.6 97.59 mg/Kg 99 80 - 120

Lab Sample ID: 490-176475-E-19-C MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 605114

Spike MSD MSD %Rec. RPD Sample Sample Analyte Result Qualifier Added Result Unit %Rec RPD Limit Chloride  $\overline{\mathsf{ND}}$ 98.8 98.38 mg/Kg 100 80 - 120

Lab Sample ID: MB 490-605255/1-A

Matrix: Solid

Analysis Batch: 605525

MR MR Analyte Result Qualifier RL MDL Unit Prepared Analyzed Chloride ND 10.1 07/08/19 14:32 7 07 mg/Kg

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Client Sample ID: Method Blank

**Prep Type: Soluble** 

**Prep Type: Soluble** 

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**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

### QC Sample Results

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 490-605255/2-A

**Matrix: Solid** 

Analysis Batch: 605525

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits 101 Chloride 101.8 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 490-605255/3-A **Matrix: Solid** 

Analysis Batch: 605525

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 101 100.7 mg/Kg 100 90 - 110

Lab Sample ID: 490-176553-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 605525

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Analyte Limits Unit %Rec Chloride ND 99.6 97.04 mg/Kg 97 80 - 120

Lab Sample ID: 490-176553-A-1-F MSD

**Matrix: Solid** 

Analysis Batch: 605525

Sample Sample MSD MSD RPD Spike %Rec. Limit Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Chloride ND 99.6 99.04 80 - 120 20 mg/Kg 99

Eurofins TestAmerica, Nashville

Client: Sport Environmental Services LLC Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

### **GC/MS VOA**

### Prep Batch: 604587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-9 MS	SB1-002 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-9 MSD	SB1-002 @ 15'bgs	Total/NA	Solid	5030B	

### Analysis Batch: 604848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	8260B	604587
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	8260B	604587
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	8260B	604587
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	8260B	604587
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	8260B	604587
MB 490-604848/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-604848/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-604848/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 604853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	8260B	604587
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	8260B	604587
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	8260B	604587
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	8260B	604587
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	8260B	604587
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	8260B	604587
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	8260B	604587
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	8260B	604587
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	8260B	604587
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	8260B	604587
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	8260B	604587
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	8260B	604587
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	8260B	604587
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	8260B	604587
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	8260B	604587

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Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

### **GC/MS VOA (Continued)**

### Analysis Batch: 604853 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-604853/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-604853/4	Lab Control Sample	Total/NA	Solid	8260B	
490-176570-9 MS	SB1-002 @ 15'bgs	Total/NA	Solid	8260B	604587
490-176570-9 MSD	SB1-002 @ 15'bgs	Total/NA	Solid	8260B	604587

### Analysis Batch: 604929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	8260B	605003
MB 490-604929/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-604929/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-604929/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

### **Prep Batch: 605003**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	5030B	

#### **GC VOA**

#### **Prep Batch: 604585**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	5030B	
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	5030B	
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	5030B	
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	5030B	
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	5030B	
MB 490-604585/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-604585/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-604585/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
490-176570-1 MS	BG-001 @ 0-1'bgs	Total/NA	Solid	5030B	
490-176570-1 MSD	BG-001 @ 0-1'bgs	Total/NA	Solid	5030B	

#### Analysis Batch: 604677

. Released to Imaging: 6/23/2022 4:26:56 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	8015B	604585
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	8015B	604585
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	8015B	604585

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Client: Sport Environmental Services LLC

Job ID: 490-176570-1 Project/Site: XTO Energy SDG: NM C State NCT - 2 #010 (1RP-5027)

# **GC VOA (Continued)**

### Analysis Batch: 604677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	8015B	604585
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	8015B	604585
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	8015B	604585
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	8015B	604585
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	8015B	604585
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	8015B	604585
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	8015B	604585
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	8015B	604585
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	8015B	604585
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	8015B	604585
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	8015B	604585
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	8015B	604585
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	8015B	604585
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	8015B	604585
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	8015B	604585
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	8015B	604585
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	8015B	604585
MB 490-604585/1-A	Method Blank	Total/NA	Solid	8015B	604585
LCS 490-604585/2-A	Lab Control Sample	Total/NA	Solid	8015B	604585
LCSD 490-604585/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	604585
490-176570-1 MS	BG-001 @ 0-1'bgs	Total/NA	Solid	8015B	604585
490-176570-1 MSD	BG-001 @ 0-1'bgs	Total/NA	Solid	8015B	604585

#### GC Semi VOA

#### **Prep Batch: 605571**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	3550C	
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	3550C	
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	3550C	
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	3550C	
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	3550C	
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	3550C	
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	3550C	
MB 490-605571/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-605571/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-176569-A-8-F MS	Matrix Spike	Total/NA	Solid	3550C	
490-176569-A-8-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

### **Prep Batch: 605574**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	3550C	
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	3550C	
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	3550C	
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	3550C	
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	3550C	
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	3550C	
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	3550C	
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	3550C	
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	3550C	
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	3550C	

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Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

### **GC Semi VOA (Continued)**

### Prep Batch: 605574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	3550C	
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	3550C	
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	3550C	
MB 490-605574/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-605574/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-176570-8 MS	SB1-002 @ 10'bgs	Total/NA	Solid	3550C	
490-176570-8 MSD	SB1-002 @ 10'bgs	Total/NA	Solid	3550C	

#### Analysis Batch: 605868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-8	SB1-002 @ 10'bgs	Total/NA	Solid	8015B	605574
490-176570-9	SB1-002 @ 15'bgs	Total/NA	Solid	8015B	605574
490-176570-10	SB1-002 @ 20'bgs	Total/NA	Solid	8015B	605574
490-176570-11	SB2-001 @ 0-1'bgs	Total/NA	Solid	8015B	605574
490-176570-12	SB2-001 @ 5'bgs	Total/NA	Solid	8015B	605574
490-176570-13	SB2-001 @ 10'bgs	Total/NA	Solid	8015B	605574
490-176570-14	SB2-001 @ 15'bgs	Total/NA	Solid	8015B	605574
490-176570-15	SB2-001 @ 20'bgs	Total/NA	Solid	8015B	605574
490-176570-16	SB3-001 @ 0-1'bgs	Total/NA	Solid	8015B	605574
490-176570-17	SB3-001 @ 5'bgs	Total/NA	Solid	8015B	605574
490-176570-18	SB3-001 @ 10'bgs	Total/NA	Solid	8015B	605574
490-176570-19	SB3-001 @ 15'bgs	Total/NA	Solid	8015B	605574
490-176570-20	SB3-001 @ 20'bgs	Total/NA	Solid	8015B	605574
MB 490-605574/1-A	Method Blank	Total/NA	Solid	8015B	605574
LCS 490-605574/2-A	Lab Control Sample	Total/NA	Solid	8015B	605574
490-176570-8 MS	SB1-002 @ 10'bgs	Total/NA	Solid	8015B	605574
490-176570-8 MSD	SB1-002 @ 10'bgs	Total/NA	Solid	8015B	605574

### Analysis Batch: 605873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Total/NA	Solid	8015B	605571
490-176570-2	BG-001 @ 5'bgs	Total/NA	Solid	8015B	605571
490-176570-3	BG-001 @ 10'bgs	Total/NA	Solid	8015B	605571
490-176570-4	BG-001 @ 15'bgs	Total/NA	Solid	8015B	605571
490-176570-5	BG-001 @ 20'bgs	Total/NA	Solid	8015B	605571
490-176570-6	SB1-002 @ 0-1'bgs	Total/NA	Solid	8015B	605571
490-176570-7	SB1-002 @ 5'bgs	Total/NA	Solid	8015B	605571
MB 490-605571/1-A	Method Blank	Total/NA	Solid	8015B	605571
LCS 490-605571/2-A	Lab Control Sample	Total/NA	Solid	8015B	605571
490-176569-A-8-F MS	Matrix Spike	Total/NA	Solid	8015B	605571
490-176569-A-8-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	605571

### HPLC/IC

### Leach Batch: 605001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-605001/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-605001/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-605001/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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### **QC Association Summary**

Client: Sport Environmental Services LLC Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

HPLC/IC

Leach Batch: 605004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-176570-2	BG-001 @ 5'bgs	Soluble	Solid	DI Leach	
490-176570-3	BG-001 @ 10'bgs	Soluble	Solid	DI Leach	
490-176570-4	BG-001 @ 15'bgs	Soluble	Solid	DI Leach	
490-176570-5	BG-001 @ 20'bgs	Soluble	Solid	DI Leach	
490-176570-6	SB1-002 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-176475-E-19-B MS	Matrix Spike	Soluble	Solid	DI Leach	
490-176475-E-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 605114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-1	BG-001 @ 0-1'bgs	Soluble	Solid	300.0	605004
490-176570-2	BG-001 @ 5'bgs	Soluble	Solid	300.0	605004
490-176570-3	BG-001 @ 10'bgs	Soluble	Solid	300.0	605004
490-176570-4	BG-001 @ 15'bgs	Soluble	Solid	300.0	605004
490-176570-5	BG-001 @ 20'bgs	Soluble	Solid	300.0	605004
490-176570-6	SB1-002 @ 0-1'bgs	Soluble	Solid	300.0	605004
MB 490-605001/1-A	Method Blank	Soluble	Solid	300.0	605001
LCS 490-605001/2-A	Lab Control Sample	Soluble	Solid	300.0	605001
LCSD 490-605001/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	605001
490-176475-E-19-B MS	Matrix Spike	Soluble	Solid	300.0	605004
490-176475-E-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	605004

### Leach Batch: 605255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-7	SB1-002 @ 5'bgs	Soluble	Solid	DI Leach	_
490-176570-8	SB1-002 @ 10'bgs	Soluble	Solid	DI Leach	
490-176570-9	SB1-002 @ 15'bgs	Soluble	Solid	DI Leach	
490-176570-10	SB1-002 @ 20'bgs	Soluble	Solid	DI Leach	
490-176570-11	SB2-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-176570-12	SB2-001 @ 5'bgs	Soluble	Solid	DI Leach	
490-176570-13	SB2-001 @ 10'bgs	Soluble	Solid	DI Leach	
490-176570-14	SB2-001 @ 15'bgs	Soluble	Solid	DI Leach	
490-176570-15	SB2-001 @ 20'bgs	Soluble	Solid	DI Leach	
490-176570-16	SB3-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-176570-17	SB3-001 @ 5'bgs	Soluble	Solid	DI Leach	
490-176570-18	SB3-001 @ 10'bgs	Soluble	Solid	DI Leach	
490-176570-19	SB3-001 @ 15'bgs	Soluble	Solid	DI Leach	
490-176570-20	SB3-001 @ 20'bgs	Soluble	Solid	DI Leach	
MB 490-605255/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-605255/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-605255/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-176553-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
490-176553-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 605525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-7	SB1-002 @ 5'bgs	Soluble	Solid	300.0	605255
490-176570-8	SB1-002 @ 10'bgs	Soluble	Solid	300.0	605255
490-176570-9	SB1-002 @ 15'bgs	Soluble	Solid	300.0	605255
490-176570-10	SB1-002 @ 20'bgs	Soluble	Solid	300.0	605255

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### **QC Association Summary**

Client: Sport Environmental Services LLC

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

Project/Site: XTO Energy

### **HPLC/IC (Continued)**

### Analysis Batch: 605525 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-176570-11	SB2-001 @ 0-1'bgs	Soluble	Solid	300.0	605255
490-176570-12	SB2-001 @ 5'bgs	Soluble	Solid	300.0	605255
490-176570-13	SB2-001 @ 10'bgs	Soluble	Solid	300.0	605255
490-176570-14	SB2-001 @ 15'bgs	Soluble	Solid	300.0	605255
490-176570-15	SB2-001 @ 20'bgs	Soluble	Solid	300.0	605255
490-176570-16	SB3-001 @ 0-1'bgs	Soluble	Solid	300.0	605255
490-176570-17	SB3-001 @ 5'bgs	Soluble	Solid	300.0	605255
490-176570-18	SB3-001 @ 10'bgs	Soluble	Solid	300.0	605255
490-176570-19	SB3-001 @ 15'bgs	Soluble	Solid	300.0	605255
490-176570-20	SB3-001 @ 20'bgs	Soluble	Solid	300.0	605255
MB 490-605255/1-A	Method Blank	Soluble	Solid	300.0	605255
LCS 490-605255/2-A	Lab Control Sample	Soluble	Solid	300.0	605255
LCSD 490-605255/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	605255
490-176553-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	605255
490-176553-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	605255

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Client Sample ID: BG-001 @ 0-1'bgs

Date Collected: 06/26/19 10:14 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-1

Matrix: Solid

Job ID: 490-176570-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.34 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 03:12	RP	TAL NSH
Total/NA	Prep	5030B			5.89 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/02/19 22:31	S1S	TAL NSH
Total/NA	Prep	3550C			25.47 g	1.00 mL	605571	07/08/19 16:41	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605873	07/10/19 19:10	S1S	TAL NSH
Soluble	Leach	DI Leach			2.9698 g	30 mL	605004	07/03/19 12:49	S00	TAL NSH
Soluble	Analysis	300.0		1			605114	07/04/19 14:12	SW1	TAL NSH

Client Sample ID: BG-001 @ 5'bgs

Date Collected: 06/26/19 10:18

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-2

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method Prep Type Type Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5030B 5.50 g 5.0 mL 604587 07/01/19 12:13 JLP TAL NSH Total/NA 8260B Analysis 5 mL 604853 07/03/19 03:42 RP TAL NSH 1 5 g Total/NA Prep 5030B 5.53 g 5.0 mL 604585 07/01/19 12:13 JLP TAL NSH 07/03/19 00:13 Total/NA 8015B 604677 TAL NSH 0.1 mL 5 mL S1S Analysis 3550C Total/NA Prep 25.89 g 1.00 mL 605571 07/08/19 16:41 LOJ TAL NSH Total/NA 8015B 605873 TAL NSH Analysis 07/10/19 19:28 S1S 1 Soluble Leach DI Leach 3.0140 g 30 mL 605004 07/03/19 12:49 SOO TAL NSH Soluble 300.0 605114 07/04/19 14:28 SW1 TAL NSH Analysis 1

Client Sample ID: BG-001 @ 10'bgs

Date Collected: 06/26/19 10:19

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.25 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 04:11	RP	TAL NSH
Total/NA	Prep	5030B			5.18 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 00:47	S1S	TAL NSH
Total/NA	Prep	3550C			25.33 g	1.00 mL	605571	07/08/19 16:41	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605873	07/10/19 19:46	S1S	TAL NSH
Soluble	Leach	DI Leach			3.0184 g	30 mL	605004	07/03/19 12:49	S00	TAL NSH
Soluble	Analysis	300.0		1			605114	07/04/19 14:45	SW1	TAL NSH

Client Sample ID: BG-001 @ 15'bgs

Date Collected: 06/26/19 10:20

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.48 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 04:41	RP	TAL NSH

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11

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1 SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: BG-001 @ 15'bgs

Date Collected: 06/26/19 10:20 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-4

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.29 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 01:21	S1S	TAL NSH
Total/NA	Prep	3550C			25.33 g	1.00 mL	605571	07/08/19 16:41	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605873	07/10/19 20:04	S1S	TAL NSH
Soluble	Leach	DI Leach			2.9597 g	30 mL	605004	07/03/19 12:49	S00	TAL NSH
Soluble	Analysis	300.0		1			605114	07/04/19 15:01	SW1	TAL NSH

Lab Sample ID: 490-176570-5 Client Sample ID: BG-001 @ 20'bgs

Date Collected: 06/26/19 10:21 Date Received: 06/29/19 08:50

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method Amount Prep Type Type Run Factor Amount Number or Analyzed Analyst Lab Total/NA Prep 5030B 5.60 g 5.0 mL 604587 07/01/19 12:13 JLP TAL NSH Total/NA 8260B 604853 07/03/19 05:11 RP TAL NSH Analysis 5 g 5 ml 1 Total/NA Prep 5030B 5.35 q 5.0 mL 604585 07/01/19 12:13 JLP TAL NSH Total/NA 8015B 0.1 mL 5 mL 604677 07/03/19 01:55 S1S TAL NSH Analysis 1 Total/NA 3550C 25.23 g 1.00 mL 605571 07/08/19 16:41 LOJ TAL NSH Prep Total/NA 8015B 07/10/19 20:22 TAL NSH 605873 S1S Analysis 1 Soluble Leach DI Leach 2.9773 g 30 mL 605004 07/03/19 12:49 S00 TAL NSH 300.0 605114 07/04/19 15:18 SW1 TAL NSH Soluble Analysis 1

Client Sample ID: SB1-002 @ 0-1'bgs Lab Sample ID: 490-176570-6

Date Collected: 06/26/19 10:34 Date Received: 06/29/19 08:50

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 05:41	RP	TAL NSH
Total/NA	Prep	5030B			5.31 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 02:29	S1S	TAL NSH
Total/NA	Prep	3550C			25.03 g	1.00 mL	605571	07/08/19 16:41	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605873	07/10/19 20:40	S1S	TAL NSH
Soluble	Leach	DI Leach			2.9678 g	30 mL	605004	07/03/19 12:49	soo	TAL NSH
Soluble	Analysis	300.0		1			605114	07/04/19 15:35	SW1	TAL NSH

Client Sample ID: SB1-002 @ 5'bgs Lab Sample ID: 490-176570-7

Date Collected: 06/26/19 10:35 Date Received: 06/29/19 08:50

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5030B 5.48 g 5.0 mL 604587 07/01/19 12:13 JLP TAL NSH Total/NA 8260B 5 mL 604853 07/03/19 06:11 RP TAL NSH Analysis 5 g Total/NA Prep 5030B 5.06 g 5.0 mL 604585 07/01/19 12:13 JLP TAL NSH Total/NA Analysis 8015B 0.1 mL 5 mL 604677 07/03/19 03:03 S1S TAL NSH

Eurofins TestAmerica, Nashville

**Matrix: Solid** 

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 5'bgs

Date Collected: 06/26/19 10:35 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.17 g	1.00 mL	605571	07/08/19 16:41	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605873	07/10/19 20:59	S1S	TAL NSH
Soluble	Leach	DI Leach			3.0079 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 17:01	S00	TAL NSH

Client Sample ID: SB1-002 @ 10'bgs

Date Collected: 06/26/19 10:36 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-8

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.27 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 06:41	RP	TAL NSH
Total/NA	Prep	5030B			5.62 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 03:37	S1S	TAL NSH
Total/NA	Prep	3550C			25.62 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/10/19 22:06	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9938 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 17:17	S00	TAL NSH

Client Sample ID: SB1-002 @ 15'bgs

Date Collected: 06/26/19 10:37

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-9

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.06 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 02:42	RP	TAL NSH
Total/NA	Prep	5030B			5.00 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 04:11	S1S	TAL NSH
Total/NA	Prep	3550C			25.14 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/10/19 23:35	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9785 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 17:34	S00	TAL NSH

Client Sample ID: SB1-002 @ 20'bgs

Date Collected: 06/26/19 10:38

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-10

**Matrix: Solid** 

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 07:11	RP	TAL NSH
Total/NA	Prep	5030B			5.43 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 04:45	S1S	TAL NSH
Total/NA	Prep	3550C			25.71 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/10/19 23:53	AK1	TAL NSH

Eurofins TestAmerica, Nashville

### **Lab Chronicle**

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB1-002 @ 20'bgs

Date Collected: 06/26/19 10:38 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-10

Matrix: Solid

Job ID: 490-176570-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9775 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 17:51	S00	TAL NSH

Client Sample ID: SB2-001 @ 0-1'bgs

Date Collected: 06/26/19 10:42 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-11

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.38 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 07:41	RP	TAL NSH
Total/NA	Prep	5030B			5.96 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 05:19	S1S	TAL NSH
Total/NA	Prep	3550C			25.04 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 00:11	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9997 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 18:07	S00	TAL NSH

Client Sample ID: SB2-001 @ 5'bgs

Date Collected: 06/26/19 10:43

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-12

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 08:11	RP	TAL NSH
Total/NA	Prep	5030B			5.59 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 05:54	S1S	TAL NSH
Total/NA	Prep	3550C			25.43 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 00:29	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9970 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 18:24	S00	TAL NSH

Client Sample ID: SB2-001 @ 10'bgs

Date Collected: 06/26/19 10:44

Date Received: 06/29/19 08:50

Lab Sampi	e ID: 490	J-176570	<b>U-13</b>
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Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 08:41	RP	TAL NSH
Total/NA	Prep	5030B			5.55 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 06:28	S1S	TAL NSH
Total/NA	Prep	3550C			25.75 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 00:47	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9905 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 19:13	soo	TAL NSH

Eurofins TestAmerica, Nashville

Client Sample ID: SB2-001 @ 15'bgs

Date Collected: 06/26/19 10:45 Date Received: 06/29/19 08:50 Lab Sample ID: 490-176570-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.10 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 09:11	RP	TAL NSH
Total/NA	Prep	5030B			5.21 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 07:02	S1S	TAL NSH
Total/NA	Prep	3550C			25.42 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 01:04	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0407 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 19:30	S00	TAL NSH

Client Sample ID: SB2-001 @ 20'bgs

Date Collected: 06/26/19 10:46

Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-15

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.60 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604853	07/03/19 09:41	RP	TAL NSH
Total/NA	Prep	5030B			5.06 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 07:36	S1S	TAL NSH
Total/NA	Prep	3550C			25.24 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 01:22	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9515 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 19:47	S00	TAL NSH

Client Sample ID: SB3-001 @ 0-1'bgs

Date Collected: 06/26/19 10:50

Date Received: 06/29/19 08:50

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.29 g	5.0 mL	605003	07/03/19 12:58	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604929	07/03/19 15:51	S1S	TAL NSH
Total/NA	Prep	5030B			5.61 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604848	07/03/19 03:40	P1B	TAL NSH
Total/NA	Prep	5030B			5.31 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 08:10	S1S	TAL NSH
Total/NA	Prep	3550C			25.34 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 01:40	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0309 g	30 mL	605255	07/05/19 13:58	SOO	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 20:03	SOO	TAL NSH

Client Sample ID: SB3-001 @ 5'bgs

Date Collected: 06/26/19 10:51 Date Received: 06/29/19 08:50

Project/Site: XTO Energy

Lab Sample ID: 490-176570-17

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.73 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604848	07/03/19 04:09	P1B	TAL NSH
Total/NA	Prep	5030B			5.69 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 08:44	S1S	TAL NSH
Total/NA	Prep	3550C			25.63 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 01:58	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0014 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 20:20	SOO	TAL NSH

Client Sample ID: SB3-001 @ 10'bgs

Date Collected: 06/26/19 10:52 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-18 **Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Method Prep Type Type Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5030B 5.50 g 5.0 mL 604587 07/01/19 12:13 JLP TAL NSH Total/NA 8260B 604848 Analysis 5 mL 07/03/19 04:38 P<sub>1</sub>R TAL NSH 1 5 g Total/NA Prep 5030B 5.19 g 5.0 mL 604585 07/01/19 12:13 JLP TAL NSH Total/NA 8015B 0.1 mL 604677 07/03/19 09:18 TAL NSH 5 mL S1S Analysis 3550C Total/NA Prep 25.24 g 1.00 mL 605574 07/08/19 17:20 LOJ TAL NSH Total/NA 8015B 605868 TAL NSH Analysis 07/11/19 02:16 AK1 1 Soluble Leach DI Leach 3.0353 g 30 mL 605255 07/05/19 13:58 SOO TAL NSH Soluble 300.0 605525 07/08/19 20:36 SOO TAL NSH Analysis 1

Client Sample ID: SB3-001 @ 15'bgs

Date Collected: 06/26/19 10:53 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-19 **Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.21 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604848	07/03/19 05:07	P1B	TAL NSH
Total/NA	Prep	5030B			5.21 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 09:52	S1S	TAL NSH
Total/NA	Prep	3550C			25.01 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 02:33	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9922 g	30 mL	605255	07/05/19 13:58	S00	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 20:53	S00	TAL NSH

Client Sample ID: SB3-001 @ 20'bgs

Lab Sample ID: 490-176570-20 Date Collected: 06/26/19 10:54 Date Received: 06/29/19 08:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5.0 mL	604587	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	604848	07/03/19 05:35	P1B	TAL NSH

Eurofins TestAmerica, Nashville

Matrix: Solid

### **Lab Chronicle**

Client: Sport Environmental Services LLC

Job ID: 490-176570-1 Project/Site: XTO Energy SDG: NM C State NCT - 2 #010 (1RP-5027)

Client Sample ID: SB3-001 @ 20'bgs

Date Collected: 06/26/19 10:54 Date Received: 06/29/19 08:50

Lab Sample ID: 490-176570-20

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.44 g	5.0 mL	604585	07/01/19 12:13	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	604677	07/03/19 10:26	S1S	TAL NSH
Total/NA	Prep	3550C			25.44 g	1.00 mL	605574	07/08/19 17:20	LOJ	TAL NSH
Total/NA	Analysis	8015B		1			605868	07/11/19 02:51	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0084 g	30 mL	605255	07/05/19 13:58	SOO	TAL NSH
Soluble	Analysis	300.0		1			605525	07/08/19 21:09	S00	TAL NSH

### Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

### **Method Summary**

Client: Sport Environmental Services LLC

Project/Site: XTO Energy

Job ID: 490-176570-1

SDG: NM C State NCT - 2 #010 (1RP-5027)

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8015B	Gasoline Range Organics - (GC)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL NSH
300.0	Anions, Ion Chromatography	MCAWW	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL NSH

### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Eurofins TestAmerica, Nashville

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### **Accreditation/Certification Summary**

Client: Sport Environmental Services LLC

Job ID: 490-176570-1

Project/Site: XTO Energy SDG: NM C State NCT - 2 #010 (1RP-5027)

### Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	09-30-19
Arizona	State Program	9	AZ0473	05-05-20
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-20
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	06-30-20
Illinois	NELAP	5	200010	12-09-19
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-20
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-20
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-20
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19 *
Nevada	State Program	9	TN00032	07-31-19 *
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-20
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19 *
Oklahoma	State Program	6	9412	08-31-19 *
Oregon	NELAP	10	TN200001	04-26-20
Pennsylvania	NELAP	3	68-00585	07-31-19 *
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-20
Washington	State Program	10	C789	07-19-19 *
West Virginia DEP	State Program	3	219	02-28-20
Wisconsin	State Program	5	998020430	08-31-19 *
Wyoming (UST)	A2LA		453.07	12-31-19

Eurofins TestAmerica, Nashville

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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN



### **COOLER RECEIPT FORM**

Cooler Received/Opened On06-29-2019_@08:50	
Time Samples Removed From Cooler (505) Time Samples Placed In Storage	(2 Hour Window)
1. Tracking # 626 (last 4 digits, FedEx) Courier: _FedEx_	4
IR Gun ID14740456 pH Strip Lot Chlorine Strip Lot	<u> </u>
2. Temperature of rep. sample or temp blank when opened: 3, 5 Degrees Celsius	•
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO (NA)
4. Were custody seals on outside of cooler?	(ES)NONA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	YESNONA
6. Were custody papers inside cooler?	(ES), NONA
certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES No. and Intact	YESNONA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (Ice ce-pack Ice (direct contact) Dry Ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YES. NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	(ES).NONA
12. Did all container labels and tags agree with custody papers?	YES. NONA
13a. Were VOA vials received?	YES. NO. NA
b. Was there any observable headspace present in any VOA vial?	YESNO(NA)
	<u> </u>
Larger than this.	
44. Was there a Trip Blank in this seeler?	- <b>4</b>
14. Was there a Trip Blank in this cooler? YESNO.1.NA If multiple coolers, sequence	e #
1 certify that I unloaded the cooler and answered questions 7-14 (intial)  15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	VES NO M
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YESNONA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	
17. Were custody papers properly filled out (ink, signed, etc)?	VESNONA
18. Did you sign the custody papers in the appropriate place?	YES.).NONA
19. Were correct containers used for the analysis requested?	KESTNONA
20. Was sufficient amount of sample sent in each container?	YES NONA
I certify that I entered this project into LIMS and answered questions 17-20 (intial)	
I certify that I attached a label with the unique LIMS number to each container (intial)	
21. Were there Non-Conformance issues at login? YES. NO Was a NCM generated? YES. (NO)	<u> </u>
hitto a month of the second of the	

BIS = Broken in shipment Cooler Receipt Form.doc

### Midland #264

**TestAmerica Nashville** 

2960 Foster Creighton Drive

## Chain of Custody Record

HE LEADER IN ENVIRONMENTAL TESTING **TestAmericc** 

TestAmerica Laboratories, Inc. Sample Specific Notes: 176570 Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Loc: 490 Sampler: Clint Elliott For Lab Use Only: Lab Sampling: Walk-in Client: Job / SDG No. COC No: Date: 04/23/2049 06/28/2019 Carrier Lab Contact: Jennifer Gambill Site Contact: Debi Moore Other: Chloride 300 8015B\_GRO, 8260B 300\_ORGFM\_28D, 8015B\_DRO, ☐ RCRA Perform MS / MSD (Y / N) Filtered Sample (Y/N) Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the ☐ NPDES # of Cont. WORKING DAYS Matrix Analysis Turnaround Time Ŋ S S S S Ø S S Ø Regulatory Program: Dow Project Manager: Debi Moore Type (C=Comp, G=Grab) Sample TAT if different from Below Ø Ö O Ö Ø G Q G G G 2 weeks 1 week 2 days Tel/Fax: (432) 683-1100 1 day Sample Time 1014 1018 1019 1034 1035 1036 1037 1038 1020 □ CALENDAR DAYS 1021 Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 Sample Date Sample Identification Site: NM C State NCT - 2 #010 (1RP-5027) SB1-002 @ 0-1'bgs SB1-002 @10 'bgs SB1-002 @15 bgs Phone SB1-002 @ 5 'bgs BG-001 @ 0-1'bgs BG-001 @15 'bgs BG-001 @20 'bgs SB1-002 @20 'bgs BG-001 @ 5 'bgs BG-001 @10 'bgs Client Contact Nashville, TN 37204-3719 phone 615.726.0177 fax 615.726.3404 P O # Purchase Order Not Required Sport Environmental Services, LLC Possible Hazard Identification: Project Name: XTO Energy 502 N. Big Spring Street Midland, TX 79701 432) 683-1100 888) 500-0622 Page 50 of 51

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018 0880 Pate/Time: 19 Company:

220

Date/Time: 6 - 2 \( \) \( \) \( \) \( \)

Company: Corrd

Cooler Temp. (°C): Obs'd:

Received by:

Date/Time: Date/Time: 6-2 &

Company: Sport Env

Custody Seal No.

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Custody Seals Intact:

Relinquished by: Relinquished by: Relinquished by:

Special Instructions/QC Requirements & Comments: Comments Section if the lab is to dispose of the sample

Company

Received in Laboral By

Date/Time:

ر انا

Company:

Company:

Therm ID No.

Z.5.36

☐ Archive for

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Date/Tigne

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<del>7/11</del>/2019

### Midland #264

# **Chain of Custody Record**

THE LEADER IN ENVIRONMENTAL TESTING **TestAmerico** 

TestAmerica Laboratories, Inc.

□ Other:

☐ RCRA

□ NPDES

Regulatory Program: Dw

Sample Specific Notes: ပ္ပံ 176570 Loc: 490 Sampler: Clint Elliott For Lab Use Only: Walk-in Client: ab Sampling: Job / SDG No. ö COC No: Date: 84/23/2019 0 6/28/2019 Carrier Lab Contact: Jennifer Gambill Site Contact: Debi Moore Chloride 300 × 8015B\_GRO, 8260B 300\_ORGFM\_28D, 8015B\_DRO, Perform MS / MSD (Y / N) Filtered Sample (Y / N ) # of Cont. ☑ WORKING DAYS Matrix Analysis Turnaround Time S Ø S S Ø S S S S S Project Manager: Debi Moore Type (C=Comp, G=Grab) Sample TAT if different from Below Ø Ö Ö Ö Ö Ø Ö O Ö Ø 2 weeks 1 week 2 days Tel/Fax: (432) 683-1100 1 day Sample Time 1042 1043 1045 1046 1050 1052 1053 1054 □ CALENDAR DAYS 1044 1051 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 6/26/2019 Sample Date Sample Identification Site: NM C State NCT - 2 #010 (1RP-5027) SB3-001 @ 0-1'bgs SB2-001 @ 0-1'bgs SB2-001 @10 'bgs SB2-001 @15 'bgs SB2-001 @20 'bgs SB3-001 @20 'bgs SB2-001 @ 5 'bgs SB3-001 @ 5 bgs SB3-001 @10 'bgs SB3-001 @15 'bgs Phone FAX Client Contact P O # Purchase Order Not Required Sport Environmental Services, LLC Project Name: XTO Energy 502 N. Big Spring Street Midland, TX 79701 432) 683-1100 888) 500-0622

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018 3 Cataling 10 Therm ID No Date/Figne: Date/Time: Company: ALAS Company: Corr'd Company 3-506 Cooler Temp. (C): Obs'd: poratory by Received in L Received by: Received by: Date/Time: 6-78 Date/Time: 1/2/ Date/Time: 6-78 104 9 Custody Seal No.: Company: Sport Env (j) (V) Company: Company: 9 □

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the

U Non-Hazard U Flammable U Skin Jiritani Special Instructions/QC Requirements & Comments: Comments Section if the lab is to dispose of the sample

Yes

Custody Seals Intact.

Relinquished by: Relinquished by: Relinquished by:

<del>7711</del>/2019

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:

Page 51 of 51

☐ Disposal by Lab

Nashville, TN 37204-3719 phone 615.726.0177 fax 615.726.3404 **TestAmerica Nashville** 2960 Foster Creighton Drive

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### Certificate of Analysis Summary 640304

Sport Environmental Services, LLC, Midland, TX

**Project Name: XTO Energy-NCT-2 #010** 

Project Id: NCT-2 #010 (1R-5027)

Debi Moore **Contact:** 

**Project Location:** 

**Report Date:** 10.21.2019 14:12 Project Manager: John Builes

**Date Received in Lab:** Thu 10.17.2019 13:47

	Lab Id:	640304-0	001	640304-0	002	640304-0	003	640304-	004	640304-0	005	640304-0	006
Analysis Requested	Field Id:	NCT-CP- NW @	0-1'BG	ICT-CP- NW @	5-6 'BG	NCT-CP- EF @	6'BGS	ICT-CP- WW @	0-1'BG	NCT-CP- WW @	5-6' B	NCT-CP- SW @ (	0-1'BG
Anaiysis Kequesieu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL	,	SOIL		SOIL	
	Sampled:	10.16.2019	11:10	10.16.2019	11:32	10.16.2019	11:35	10.16.2019	11:09	10.16.2019	11:31	10.16.2019	11:07
BTEX by SW 8260C	Extracted:	10.18.2019	14:00	10.18.2019	14:00	10.18.2019	14:00	10.18.2019	14:00	10.18.2019	14:00	10.18.2019	14:00
SUB: T104704215-19-30	Analyzed:	10.18.2019	18:10	10.18.2019	18:32	10.18.2019	18:53	10.18.2019	19:14	10.18.2019	19:35	10.18.2019	19:56
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.000208	0.00100	< 0.000205	0.000990	< 0.000207	0.00100	< 0.000207	0.00100	< 0.000207	0.00100	<0.000208	0.00100
Toluene		< 0.00100	0.00502	< 0.000990	0.00495	< 0.00100	0.00501	< 0.00100	0.00500	< 0.00100	0.00501	<0.00100	0.00502
Ethylbenzene		< 0.000337	0.00100	< 0.000332	0.000990	< 0.000336	0.00100	< 0.000336	0.00100	< 0.000336	0.00100	< 0.000337	0.00100
m,p-Xylenes		<0.000438	0.00201	< 0.000432	0.00198	< 0.000438	0.00200	< 0.000437	0.00200	<0.000438	0.00200	<0.000438	0.00201
o-Xylene		<0.000989	0.00100	< 0.000975	0.000990	< 0.000987	0.00100	< 0.000985	0.00100	< 0.000987	0.00100	< 0.000989	0.00100
Total Xylenes		<0.000438	0.00100	< 0.000432	0.000990	< 0.000438	0.00100	< 0.000437	0.00100	<0.000438	0.00100	<0.000438	0.00100
Total BTEX		<0.000208	0.00100	< 0.000205	0.000990	<0.000207	0.00100	< 0.000207	0.00100	< 0.000207	0.00100	< 0.000208	0.00100
Inorganic Anions by EPA 300	Extracted:	10.18.2019	10:15	10.18.2019	10:15	10.18.2019	10:15	10.18.2019	10:15	10.18.2019	10:15	10.18.2019	10:15
	Analyzed:	10.18.2019	14:16	10.18.2019	14:46	10.18.2019	14:56	10.18.2019	15:06	10.18.2019	15:16	10.18.2019	15:26
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3.94 J	5.00	26.0	4.96	34.1	5.01	4.09 J	4.97	42.1	4.96	2.14 J	5.00
TPH by SW8015 Mod	Extracted:	10.18.2019	12:00	10.18.2019	12:00	10.18.2019	12:00	10.18.2019	12:00	10.18.2019	12:00	10.18.2019	12:00
	Analyzed:	10.18.2019	18:15	10.18.2019	18:33	10.18.2019	18:52	10.18.2019	19:10	10.18.2019	19:28	10.18.2019	19:46
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<15.0	50.0	<15.0	49.9	<15.0	49.9	<14.9	49.8	<15.0	50.0	<15.0	49.9
Diesel Range Organics		<15.0	50.0	<15.0	49.9	<15.0	49.9	<14.9	49.8	<15.0	50.0	<15.0	49.9
Oil Range Hydrocarbons		<15.0	50.0	<15.0	49.9	<15.0	49.9	<14.9	49.8	<15.0	50.0	<15.0	49.9
Total TPH		<15.0	50.0	<15.0	49.9	<15.0	49.9	<14.9	49.8	<15.0	50.0	<15.0	49.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

John Builes Project Manager



### Certificate of Analysis Summary 640304

Sport Environmental Services, LLC, Midland, TX

**Project Name: XTO Energy-NCT-2 #010** 

**Project Id:** NCT-2 #010 (1R-5027)

Debi Moore **Contact:** 

**Report Date:** 10.21.2019 14:12 Project Manager: John Builes **Project Location:** 

	1					ı		1	1
	Lab Id:	640304-0	07	640304-0	08	640304-0	09		
Analysis Requested	Field Id:	NCT-CP- SW @	5-6'BG	NCT-CP- EW @	0-1'BG	NCT-CP- EW @ 5	5-6'BG		
Analysis Requesicu	Depth:								
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	10.16.2019	11:33	10.16.2019	11:08	10.16.2019	11:30		
BTEX by SW 8260C	Extracted:	10.18.2019	14:00	10.18.2019	14:00	10.18.2019	14:00		
SUB: T104704215-19-30	Analyzed:	10.18.2019	20:17	10.18.2019	20:38	10.18.2019	21:00		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		< 0.000207	0.000998	<0.000208	0.00100	< 0.000205	0.000990		
Toluene		<0.000998	0.00499	< 0.00100	0.00502	<0.000990	0.00495		
Ethylbenzene		< 0.000335	0.000998	< 0.000337	0.00100	<0.000332	0.000990		
m,p-Xylenes		< 0.000436	0.00200	<0.000438	0.00201	<0.000432			
o-Xylene		<0.000983	0.000998	<0.000989	0.00100	<0.000975	0.000990		
Total Xylenes		<0.000436	0.000998	< 0.000438	0.00100	<0.000432	0.000990		
Total BTEX		<0.000207	0.000998	<0.000208	0.00100	<0.000205	0.000990		
<b>Inorganic Anions by EPA 300</b>	Extracted:	10.18.2019	10:15	10.18.2019	11:10	10.18.2019	11:10		
	Analyzed:	10.18.2019	15:36	10.18.2019	13:09	10.18.2019	13:25		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		29.8	5.00	1.33 J	5.02	21.0	4.96		
TPH by SW8015 Mod	Extracted:	10.18.2019	12:00	10.18.2019	12:00	10.18.2019	12:00		
	Analyzed:	10.18.2019	20:05	10.18.2019	20:23	10.18.2019	21:04		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	50.0	<15.0	49.9	<15.0	49.9		
Diesel Range Organics		<15.0	50.0	<15.0	49.9	<15.0	49.9		
Oil Range Hydrocarbons		<15.0	50.0	<15.0	49.9	<15.0	49.9		
Total TPH		<15.0	50.0	<15.0	49.9	<15.0	49.9		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

**Date Received in Lab:** Thu 10.17.2019 13:47

John Builes Project Manager



### **Analytical Report 640304**

### for

### **Sport Environmental Services, LLC**

Project Manager: Debi Moore

XTO Energy-NCT-2 #010 NCT-2 #010 (1R-5027) 10.21,2019

Collected By: Client



### 1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco-Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.21.2019

Project Manager: **Debi Moore Sport Environmental Services, LLC**502 North Big Spring Street
Midland, TX 79701

Reference: XENCO Report No(s): **640304 XTO Energy-NCT-2 #010**Project Address:

### **Debi Moore**:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 640304. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 640304 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**John Builes**Project Manager

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

A Small Business and Minority Company

### **Sample Cross Reference 640304**

### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
NCT-CP- NW @ 0-1'BGS	S	10.16.2019 11:10		640304-001
NCT-CP- NW @ 5-6 'BGS	S	10.16.2019 11:32		640304-002
NCT-CP- EF @ 6'BGS	S	10.16.2019 11:35		640304-003
NCT-CP- WW @ 0-1'BGS	S	10.16.2019 11:09		640304-004
NCT-CP- WW @ 5-6' BGS	S	10.16.2019 11:31		640304-005
NCT-CP- SW @ 0-1'BGS	S	10.16.2019 11:07		640304-006
NCT-CP- SW @ 5-6'BGS	S	10.16.2019 11:33		640304-007
NCT-CP- EW @ 0-1'BGS	S	10.16.2019 11:08		640304-008
NCT-CP- EW @ 5-6'BGS	S	10.16.2019 11:30		640304-009

### Page 128 of 165

### **CASE NARRATIVE**



Client Name: Sport Environmental Services, LLC

Project Name: XTO Energy-NCT-2 #010

Project ID: Report Date: 10.21.2019 *NCT-2 #010 (1R-5027)* Work Order Number(s): 640304 Date Received: 10.17.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- NW @ 0-1'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-001

Date Collected: 10.16.2019 11:10

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC

% Moisture:

SPC Analyst:

Date Prep:

10.18.2019 10:15

Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.94	5.00	0.858	mg/kg	10.18.2019 14:16	J	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DVM ARM

10.18.2019 12:00 Date Prep:

Basis: Wet Weight

Seq Number: 3104813

Parameter	Cas Number	Result	$\mathbf{RL}$	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	10.18.2019 18:15	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	10.18.2019 18:15	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	10.18.2019 18:15	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	10.18.2019 18:15	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	98	%	70-135	10.18.2019 18:15		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- NW @ 0-1'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-001 Date Collected: 10.16.2019 11:10

Analytical Method: BTEX by SW 8260C Prep Method: SW5035A

Tech: SAD % Moisture:

Analyst: CRL Date Prep: 10.18.2019 14:00 Basis: Wet Weight

Seq Number: 3104847 SUB: T104704215-19-30

Parameter	Cas Numbe	er Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000208	0.00100	0.000208	mg/kg	10.18.2019 18:10	U	1
Toluene	108-88-3	< 0.00100	0.00502	0.00100	mg/kg	10.18.2019 18:10	U	1
Ethylbenzene	100-41-4	< 0.000337	0.00100	0.000337	mg/kg	10.18.2019 18:10	U	1
m,p-Xylenes	179601-23-1	< 0.000438	0.00201	0.000438	mg/kg	10.18.2019 18:10	U	1
o-Xylene	95-47-6	< 0.000989	0.00100	0.000989	mg/kg	10.18.2019 18:10	U	1
Total Xylenes	1330-20-7	< 0.000438	0.00100	0.000438	mg/kg	10.18.2019 18:10	U	1
Total BTEX		< 0.000208	0.00100	0.000208	mg/kg	10.18.2019 18:10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Dibromofluoromethane		1868-53-7	101	%	53-142	10.18.2019 18:10		
1,2-Dichloroethane-D4		17060-07-0	104	%	53-150	10.18.2019 18:10		
Toluene-D8		2037-26-5	100	%	70-130	10.18.2019 18:10		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- NW @ 5-6 'BGS

Matrix: Soil

Date Received:10.17.2019 13:47

Lab Sample Id: 640304-002

Date Collected: 10.16.2019 11:32

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 10.18.2019 10:15

Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.0	4.96	0.852	mg/kg	10.18.2019 14:46		1

Analytical Method: TPH by SW8015 Mod

ARM

Prep Method: SW8015P

% Moisture:

Tech: DVM

Analyst:

Date Prep: 10.18.2019 12:00

Basis: Wet Weight

Seq Number: 3104813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	10.18.2019 18:33	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	10.18.2019 18:33	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	10.18.2019 18:33	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	10.18.2019 18:33	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	96	%	70-135	10.18.2019 18:33		
o-Terphenyl		84-15-1	97	%	70-135	10.18.2019 18:33		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- NW @ 5-6 'BGS

Matrix: Soil

Date Received: 10.17.2019 13:47

Lab Sample Id: 640304-002

Date Collected: 10.16.2019 11:32

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: SAD

% Moisture:

Analyst: CRL

Date Prep: 10.18.2019 14:00

Basis: Wet Weight SUB: T104704215-19-30

Seq Number:	3104847

Parameter	Cas Number	r Result	$\mathbf{RL}$	MDL	Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.000205	0.000990	0.000205	mg/kg	10.18.2019 18:32	U	1
Toluene	108-88-3	< 0.000990	0.00495	0.000990	mg/kg	10.18.2019 18:32	U	1
Ethylbenzene	100-41-4	< 0.000332	0.000990	0.000332	mg/kg	10.18.2019 18:32	U	1
m,p-Xylenes	179601-23-1	< 0.000432	0.00198	0.000432	mg/kg	10.18.2019 18:32	U	1
o-Xylene	95-47-6	< 0.000975	0.000990	0.000975	mg/kg	10.18.2019 18:32	U	1
Total Xylenes	1330-20-7	< 0.000432	0.000990	0.000432	mg/kg	10.18.2019 18:32	U	1
Total BTEX		< 0.000205	0.000990	0.000205	mg/kg	10.18.2019 18:32	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Dibromofluoromethane		1868-53-7	104	%	53-142	10.18.2019 18:32		
1,2-Dichloroethane-D4		17060-07-0	111	%	53-150	10.18.2019 18:32		
Toluene-D8		2037-26-5	101	%	70-130	10.18.2019 18:32		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- EF @ 6'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-003

Date Collected: 10.16.2019 11:35

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

SPC

% Moisture:

SPC Analyst:

Date Prep:

10.18.2019 10:15

Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.1	5.01	0.860	mø/kø	10.18.2019 14:56		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

DVM

% Moisture:

Analyst: ARM

Tech:

10.18.2019 12:00 Basis: Wet Weight Date Prep:

Seq Number: 3104813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	10.18.2019 18:52	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	10.18.2019 18:52	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	10.18.2019 18:52	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	10.18.2019 18:52	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	99	%	70-135	10.18.2019 18:52		
o-Terphenyl		84-15-1	101	%	70-135	10.18.2019 18:52		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- EF @ 6'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-003

Date Collected: 10.16.2019 11:35

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: SAD

% Moisture:

CRL Analyst:

Seq Number: 3104847

Date Prep: 10.18.2019 14:00

Basis: Wet Weight SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 18:53	U	1
Toluene	108-88-3	< 0.00100	0.00501	0.00100	mg/kg	10.18.2019 18:53	U	1
Ethylbenzene	100-41-4	< 0.000336	0.00100	0.000336	mg/kg	10.18.2019 18:53	U	1
m,p-Xylenes	179601-23-1	< 0.000438	0.00200	0.000438	mg/kg	10.18.2019 18:53	U	1
o-Xylene	95-47-6	< 0.000987	0.00100	0.000987	mg/kg	10.18.2019 18:53	U	1
Total Xylenes	1330-20-7	< 0.000438	0.00100	0.000438	mg/kg	10.18.2019 18:53	U	1
Total BTEX		< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 18:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	97	%	53-142	10.18.2019 18:53	
1,2-Dichloroethane-D4	17060-07-0	105	%	53-150	10.18.2019 18:53	
Toluene-D8	2037-26-5	104	%	70-130	10.18.2019 18:53	



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- WW @ 0-1'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-004

Date Collected: 10.16.2019 11:09

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst:

SPC

Date Prep: 10.18.2019 10:15 Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.09	4.97	0.853	mø/kø	10.18.2019 15:06	Ţ	1

Analytical Method: TPH by SW8015 Mod

ARM

Prep Method: SW8015P

% Moisture:

DVM Tech:

Analyst:

10.18.2019 12:00 Date Prep:

Basis: Wet Weight

10.18.2019 19:10

10.18.2019 19:10

70-135

70-135

Seq Number: 3104813

1-Chlorooctane

o-Terphenyl

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	49.8	14.9	mg/kg	10.18.2019 19:10	U	1
Diesel Range Organics	C10C28DRO	<14.9	49.8	14.9	mg/kg	10.18.2019 19:10	U	1
Oil Range Hydrocarbons	PHCG2835	<14.9	49.8	14.9	mg/kg	10.18.2019 19:10	U	1
Total TPH	PHC635	<14.9	49.8	14.9	mg/kg	10.18.2019 19:10	U	1
Surrogate	Ca	ns Number	% Recovery	Units	Limits	Analysis Date	Flag	

95

92

111-85-3

84-15-1



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- WW @ 0-1'BGS

Matrix: Soil

Date Received:10.17.2019 13:47

Lab Sample Id: 640304-004

Date Collected: 10.16.2019 11:09

Analytical Method: BTEX by SW 8260C

Prep Method: SW5035A

Tech: SAD

% Moisture:

Analyst: CRL

Date Prep: 10.18.2019 14:00

Basis: Wet Weight SUB: T104704215-19-30

Seq Number: 3104847

Parameter	Cas Number	Result	RL	MDL	Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 19:14	U	1
Toluene	108-88-3	< 0.00100	0.00500	0.00100	mg/kg	10.18.2019 19:14	U	1
Ethylbenzene	100-41-4	< 0.000336	0.00100	0.000336	mg/kg	10.18.2019 19:14	U	1
m,p-Xylenes	179601-23-1	< 0.000437	0.00200	0.000437	mg/kg	10.18.2019 19:14	U	1
o-Xylene	95-47-6	< 0.000985	0.00100	0.000985	mg/kg	10.18.2019 19:14	U	1
Total Xylenes	1330-20-7	< 0.000437	0.00100	0.000437	mg/kg	10.18.2019 19:14	U	1
Total BTEX		< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 19:14	U	1
Surrogate	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	53-142	10.18.2019 19:14	
1,2-Dichloroethane-D4	17060-07-0	110	%	53-150	10.18.2019 19:14	
Toluene-D8	2037-26-5	100	%	70-130	10.18.2019 19:14	



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- WW @ 5-6' BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-005

Date Collected: 10.16.2019 11:31

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC % Moisture:

SPC

Analyst:

Date Prep: 10.18.2019 10:15 Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.1	4.96	0.852	mg/kg	10.18.2019 15:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DVM ARM

10.18.2019 12:00 Date Prep:

Basis: Wet Weight

Seq Number: 3104813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	10.18.2019 19:28	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	10.18.2019 19:28	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	10.18.2019 19:28	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	10.18.2019 19:28	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	96	%	70-135	10.18.2019 19:28		
o-Terphenyl		84-15-1	98	%	70-135	10.18.2019 19:28		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- WW @ 5-6' BGS

Matrix: Soil

Date Received:10.17.2019 13:47

Lab Sample Id: 640304-005

Date Collected: 10.16.2019 11:31

Analytical Method: BTEX by SW 8260C

CRL

Prep Method: SW5035A

% Moisture:

Basis:

Tech: SAD

Analyst:

Date Prep: 10.18.2019 14:00

Wet Weight

Seq Number: 3104847

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 19:35	U	1
Toluene	108-88-3	< 0.00100	0.00501	0.00100	mg/kg	10.18.2019 19:35	U	1
Ethylbenzene	100-41-4	< 0.000336	0.00100	0.000336	mg/kg	10.18.2019 19:35	U	1
m,p-Xylenes	179601-23-1	< 0.000438	0.00200	0.000438	mg/kg	10.18.2019 19:35	U	1
o-Xylene	95-47-6	< 0.000987	0.00100	0.000987	mg/kg	10.18.2019 19:35	U	1
Total Xylenes	1330-20-7	< 0.000438	0.00100	0.000438	mg/kg	10.18.2019 19:35	U	1
Total BTEX		< 0.000207	0.00100	0.000207	mg/kg	10.18.2019 19:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	10.18.2019 19:35	
1,2-Dichloroethane-D4	17060-07-0	118	%	53-150	10.18.2019 19:35	
Toluene-D8	2037-26-5	100	%	70-130	10.18.2019 19:35	



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- SW @ 0-1'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-006

Date Collected: 10.16.2019 11:07

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst:

SPC

Date Prep: 10.18.2019 10:15 Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.14	5.00	0.858	mg/kg	10.18.2019 15:26	J	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

10.18.2019 19:46

Tech: Analyst: DVM ARM

10.18.2019 12:00 Date Prep:

% Moisture: Basis:

70-135

Wet Weight

Seq Number: 3104813

o-Terphenyl

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	10.18.2019 19:46	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	10.18.2019 19:46	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	10.18.2019 19:46	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	10.18.2019 19:46	U	1
Surrogate	•	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	99	%	70-135	10.18.2019 19:46		

98

84-15-1



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- SW @ 0-1'BGS

Matrix: Soil

Date Received:10.17.2019 13:47

Lab Sample Id: 640304-006

Date Collected: 10.16.2019 11:07

Analytical Method: BTEX by SW 8260C

CRL

Prep Method: SW5035A

% Moisture:

Tech: SAD

Analyst:

Date Prep: 10.18.2019 14:00

Basis: Wet Weight

Seq Number: 3104847

SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00100	0.000208	mg/kg	10.18.2019 19:56	U	1
Toluene	108-88-3	< 0.00100	0.00502	0.00100	mg/kg	10.18.2019 19:56	U	1
Ethylbenzene	100-41-4	< 0.000337	0.00100	0.000337	mg/kg	10.18.2019 19:56	U	1
m,p-Xylenes	179601-23-1	< 0.000438	0.00201	0.000438	mg/kg	10.18.2019 19:56	U	1
o-Xylene	95-47-6	< 0.000989	0.00100	0.000989	mg/kg	10.18.2019 19:56	U	1
Total Xylenes	1330-20-7	< 0.000438	0.00100	0.000438	mg/kg	10.18.2019 19:56	U	1
Total BTEX		< 0.000208	0.00100	0.000208	mg/kg	10.18.2019 19:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	10.18.2019 19:56	
1,2-Dichloroethane-D4	17060-07-0	103	%	53-150	10.18.2019 19:56	
Toluene-D8	2037-26-5	101	%	70-130	10.18.2019 19:56	



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- SW @ 5-6'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-007

SPC

Date Collected: 10.16.2019 11:33

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: SPC % Moisture:

Analyst:

Date Prep:

10.18.2019 10:15

Basis:

Wet Weight

Seq Number: 3104801

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.8	5.00	0.858	mø/kø	10 18 2019 15:36		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DVM ARM

10.18.2019 12:00 Date Prep:

Basis: Wet Weight

Seq Number: 3104813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	50.0	15.0	mg/kg	10.18.2019 20:05	U	1
Diesel Range Organics	C10C28DRO	<15.0	50.0	15.0	mg/kg	10.18.2019 20:05	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	50.0	15.0	mg/kg	10.18.2019 20:05	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	10.18.2019 20:05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	103	%	70-135	10.18.2019 20:05		
o-Terphenyl		84-15-1	105	%	70-135	10.18.2019 20:05		



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- SW @ 5-6'BGS Matrix: Soil Date Received:10.17.2019 13:47

Lab Sample Id: 640304-007

Date Collected: 10.16.2019 11:33

Analytical Method: BTEX by SW 8260C

CRL

Prep Method: SW5035A

Tech: SAD

Analyst:

Date Prep: 10.18.2019 14:00 % Moisture: Wet Weight

Seq Number: 3104847

SUB: T104704215-19-30

Basis:

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000207	0.000998	0.000207	mg/kg	10.18.2019 20:17	U	1
Toluene	108-88-3	< 0.000998	0.00499	0.000998	mg/kg	10.18.2019 20:17	U	1
Ethylbenzene	100-41-4	< 0.000335	0.000998	0.000335	mg/kg	10.18.2019 20:17	U	1
m,p-Xylenes	179601-23-1	< 0.000436	0.00200	0.000436	mg/kg	10.18.2019 20:17	U	1
o-Xylene	95-47-6	< 0.000983	0.000998	0.000983	mg/kg	10.18.2019 20:17	U	1
Total Xylenes	1330-20-7	< 0.000436	0.000998	0.000436	mg/kg	10.18.2019 20:17	U	1
Total BTEX		< 0.000207	0.000998	0.000207	mg/kg	10.18.2019 20:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	53-142	10.18.2019 20:17	
1,2-Dichloroethane-D4	17060-07-0	109	%	53-150	10.18.2019 20:17	
Toluene-D8	2037-26-5	101	%	70-130	10.18.2019 20:17	



### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- EW @ 0-1'BGS

Matrix: Soil

Date Received: 10.17.2019 13:47

Lab Sample Id: 640304-008

Date Collected: 10.16.2019 11:08

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

% Moisture:

Tech: CHE

Analyst:

CHE

Date Prep: 10.18.2019 11:10

Basis:

Wet Weight

Seq Number: 3104768

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.33	5.02	0.862	mø/kø	10.18.2019 13:09	Ĭ	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

10.18.2019 20:23

% Moisture:

70-135

Tech: DVM

o-Terphenyl

Analyst:

ARM

Date Prep: 10.18.2019 12:00

Basis:

Wet Weight

Seq Number: 3104813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	10.18.2019 20:23	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	10.18.2019 20:23	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	10.18.2019 20:23	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	10.18.2019 20:23	U	1
Surrogate	•	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	95	%	70-135	10.18.2019 20:23		

95

84-15-1



Lab Sample Id: 640304-008

Tech:

Analytical Method: BTEX by SW 8260C

SAD

### Certificate of Analytical Results 640304

### Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Soil

Sample Id: NCT-CP- EW @ 0-1'BGS Matrix:

Date Collected: 10.16.2019 11:08

Prep Method: SW5035A

% Moisture:

Date Received:10.17.2019 13:47

Analyst: CRL Date Prep: 10.18.2019 14:00 Basis: Wet Weight

Seq Number: 3104847 SUB: T104704215-19-30

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000208	0.00100	0.000208	mg/kg	10.18.2019 20:38	U	1
Toluene	108-88-3	< 0.00100	0.00502	0.00100	mg/kg	10.18.2019 20:38	U	1
Ethylbenzene	100-41-4	< 0.000337	0.00100	0.000337	mg/kg	10.18.2019 20:38	U	1
m,p-Xylenes	179601-23-1	< 0.000438	0.00201	0.000438	mg/kg	10.18.2019 20:38	U	1
o-Xylene	95-47-6	< 0.000989	0.00100	0.000989	mg/kg	10.18.2019 20:38	U	1
Total Xylenes	1330-20-7	< 0.000438	0.00100	0.000438	mg/kg	10.18.2019 20:38	U	1
Total BTEX		<0.000208	0.00100	0.000208	mg/kg	10.18.2019 20:38	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
D:1	1	060 52 7	00	07	52 142	10 10 2010 20 20		



# Certificate of Analytical Results 640304

# Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- EW @ 5-6'BGS

Matrix: Soil

Date Received:10.17.2019 13:47

Lab Sample Id: 640304-009

CHE

Date Collected: 10.16.2019 11:30

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

TIE

% Moisture:

Tech: CHE

Analyst:

Date Prep:

10.18.2019 11:10

Basis:

Wet Weight

Seq Number: 3104768

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.0	4.96	0.852	mg/kg	10.18.2019 13:25		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

10.18.2019 21:04

10.18.2019 21:04

70-135

70-135

% Moisture:

Tech:

Analyst:

DVM ARM

Date Prep: 10.18.2019 12:00

Basis:

Wet Weight

Seq Number: 3104819

1-Chlorooctane

o-Terphenyl

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	49.9	15.0	mg/kg	10.18.2019 21:04	U	1
Diesel Range Organics	C10C28DRO	<15.0	49.9	15.0	mg/kg	10.18.2019 21:04	U	1
Oil Range Hydrocarbons	PHCG2835	<15.0	49.9	15.0	mg/kg	10.18.2019 21:04	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	10.18.2019 21:04	U	1
Surrogate	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

93

102

111-85-3

84-15-1

Date Received: 10.17.2019 13:47

10.18.2019 21:00

10.18.2019 21:00

10.18.2019 21:00

U

U

1

1



Tech:

o-Xylene

Total Xylenes

Toluene-D8

# Certificate of Analytical Results 640304

# Sport Environmental Services, LLC, Midland, TX

XTO Energy-NCT-2 #010

Sample Id: NCT-CP- EW @ 5-6'BGS Matrix: Soil

Lab Sample Id: 640304-009 Date Collected: 10.16.2019 11:30

95-47-6

1330-20-7

Analytical Method: BTEX by SW 8260C Prep Method: SW5035A

SAD % Moisture:

Analyst: CRL Date Prep: 10.18.2019 14:00 Basis: Wet Weight Seq Number: 3104847 SUB: T104704215-19-30

< 0.000975

< 0.000432

2037-26-5

**Parameter** Cas Number Result RLMDL Units **Analysis Date** Flag Dil 0.000990 0.000205 Benzene 71-43-2 < 0.000205 mg/kg 10.18.2019 21:00 U 1 Toluene 108-88-3 < 0.000990 0.00495 0.000990 10.18.2019 21:00 U mg/kg 1 0.000990 0.000332 Ethylbenzene 100-41-4 < 0.000332 10.18.2019 21:00 U mg/kg 1 m,p-Xylenes 0.000432 179601-23-1 < 0.000432 0.00198 mg/kg 10.18.2019 21:00 U

0.000990

0.000990

102

0.000975

0.000432

%

mg/kg

mg/kg

70-130

Total BTEX	<0.000205	5 0.000990	0.000205	mg/kg	10.18.2019 21:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Dibromofluoromethane	1868-53-7	101	%	53-142	10.18.2019 21:00		
1,2-Dichloroethane-D4	17060-07-0	113	%	53-150	10.18.2019 21:00		



# **Flagging Criteria**

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- **RL** Reporting Limit

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

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

**DL** Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



# QC Summary 640304

### **Sport Environmental Services, LLC**

XTO Energy-NCT-2 #010

E300P Analytical Method: Inorganic Anions by EPA 300 Prep Method: 10.18.2019 Seq Number: 3104801 Matrix: Solid Date Prep: LCS Sample Id: 7688412-1-BKS LCSD Sample Id: 7688412-1-BSD MB Sample Id: 7688412-1-BLK RPD MB Spike LCS LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride < 0.858 250 249 100 250 100 90-110 0 20 mg/kg 10.18.2019 10:57 E300P **Analytical Method: Inorganic Anions by EPA 300** Prep Method: Seq Number: 3104768 Matrix: Solid Date Prep: 10.18.2019

7688420-1-BKS LCSD Sample Id: 7688420-1-BSD MB Sample Id: 7688420-1-BLK LCS Sample Id: Spike MB LCS LCS LCSD LCSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 254 20 10.18.2019 11:22 Chloride < 0.858 250 102 252 101 90-110 1 mg/kg

Analytical Method:Inorganic Anions by EPA 300Prep Method:E300PSeq Number:3104801Matrix:SoilDate Prep:10.18.2019Parent Sample Id:640303-001MS Sample Id:640303-001 SMSD Sample Id:640303-001 SD

Spike RPD Parent MS MS % RPD Units MSD **MSD** Limite Analysis Flag **Parameter** Result Result %Rec Limit Date Amount Result %Rec Chloride 2.52 248 251 100 251 90-110 0 20 10.18.2019 11:27 100 mg/kg

Analytical Method:Inorganic Anions by EPA 300Prep Method:E300PSeq Number:3104801Matrix: SoilDate Prep:10.18.2019

Parent Sample Id: 640303-011 MS Sample Id: 640303-011 S MSD Sample Id: 640303-011 SD

RPD Parent Spike MS MS MSD **MSD** Limits %RPD Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec %Rec Result 10.18.2019 13:47 3.55 99 99 90-110 20 Chloride 248 250 250 0 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3104768
 Matrix:
 Soil
 Date Prep:
 10.18.2019

 Parent Sample Id:
 640249-007
 MS Sample Id:
 640249-007 S
 MSD Sample Id:
 640249-007 SD

Parent Spike MS MS Limits %RPD RPD Units Analysis MSD MSD Flag Parameter Result Limit Date Result Amount %Rec Result %Rec 10.18.2019 12:53 391 99 90-110 20 Chloride 248 636 622 93 2 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3104768
 Matrix:
 Soil
 Date Prep:
 10.18.2019

 Parent Sample Id:
 640251-001
 MS Sample Id:
 640251-001 S
 MSD Sample Id:
 640251-001 SD

%RPD RPD MS Units Parent Spike MS **MSD MSD** Limits Analysis Flag **Parameter** Result Limit Date Result %Rec %Rec Amount Result 10.18.2019 11:38 0 20 Chloride 32.0 249 272 96 271 90-110 mg/kg

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

A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

LCS = Laboratory Control Sample

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

Flag

Flag

#### **QC Summary** 640304



### Sport Environmental Services, LLC

XTO Energy-NCT-2 #010

Analytical Method: TPH by SW8015 Mod

Seq Number: 3104813

MB Sample Id: 7688446-1-BLK

Matrix: Solid Date Prep: 10.18.2019

LCS Sample Id: 7688446-1-BKS LCSD Sample Id:

RPD MB Spike LCS LCS Limits %RPD Units Analysis LCSD LCSD **Parameter** Result Amount Result %Rec %Rec Limit Date Result 1000 1140 114 70-135 0 20 10.18.2019 13:00 Gasoline Range Hydrocarbons <15.0 1140 114 mg/kg 1010 101 70-135 2 20 10.18.2019 13:00 Diesel Range Organics 1000 1030 103 mg/kg <15.0

MB MB LCS LCS LCSD Limits Units Analysis LCSD Surrogate Flag %Rec Flag Flag Date %Rec %Rec 10.18.2019 13:00 1-Chlorooctane 98 129 125 70-135 % 107 10.18.2019 13:00 o-Terphenyl 100 112 70-135 %

Analytical Method: TPH by SW8015 Mod

3104819 Seq Number:

Matrix: Solid

Prep Method:

Prep Method:

SW8015P

SW8015P

7688446-1-BSD

Date Prep: 10.18.2019

LCS Sample Id: 7688447-1-BKS LCSD Sample Id: 7688447-1-BSD MB Sample Id: 7688447-1-BLK

MB Spike LCS LCS LCSD Limits %RPD **RPD** Units Analysis LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date 10.18.2019 12:54 1050 105 0 20 Gasoline Range Hydrocarbons <15.0 1000 1050 70-135 105 mg/kg 10.18.2019 12:54 Diesel Range Organics <15.0 1000 1090 109 1070 107 70-135 2 20 mg/kg

MB MB LCS LCS LCSD Limits Units LCSD Analysis Surrogate %Rec Date %Rec Flag Flag %Rec Flag 10.18.2019 12:54 1-Chlorooctane 103 108 108 70-135 % 10.18.2019 12:54 o-Terphenyl 119 115 112 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3104813 Matrix: Solid

Prep Method: Date Prep: SW8015P

10.18.2019

mg/kg

MB Units Analysis **Parameter** Flag Result Date

MB Sample Id: 7688446-1-BLK

Oil Range Hydrocarbons <15.0

Analytical Method: TPH by SW8015 Mod

Seq Number: 3104819

Oil Range Hydrocarbons

Matrix: Solid

<15.0

Prep Method:

SW8015P

10.18.2019 12:41

10.18.2019 Date Prep:

Units

MB Sample Id: 7688447-1-BLK MB

**Parameter** Result

Date

10.18.2019 12:34 mg/kg

Analysis

Flag

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery

Log Difference

[D] = 100\*(C-A) / BRPD = 200\* | (C-E) / (C+E) |[D] = 100 \* (C) / [B]Log Diff. = Log(Sample Duplicate) - Log(Original Sample) LCS = Laboratory Control Sample = Parent Result = MS/LCS Result E = MSD/LCSD Result

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

Flag

Flag

### **QC Summary** 640304



### Sport Environmental Services, LLC

XTO Energy-NCT-2 #010

Analytical Method: TPH by SW8015 Mod

Seq Number: 3104813

640303-001

Matrix: Soil

SW8015P Prep Method:

Date Prep: 10.18.2019 MSD Sample Id: 640303-001 SD

MS Sample Id: 640303-001 S Parent Sample Id: %RPD RPD Parent Spike MS MS Limits Units Analysis MSD **MSD Parameter** Result Amount Result %Rec Result %Rec Limit Date

<15.0 998 1190 119 1190 70-135 0 20 10.18.2019 13:56 Gasoline Range Hydrocarbons 119 mg/kg 10.18.2019 13:56 998 1030 103 70-135 0 20 Diesel Range Organics <15.0 1030 103 mg/kg

MS MS MSD MSD Limits Units Analysis Surrogate %Rec Flag Flag Date %Rec 10.18.2019 13:56 1-Chlorooctane 124 127 70-135 % 108 10.18.2019 13:56 o-Terphenyl 111 70-135 %

Analytical Method: TPH by SW8015 Mod

3104819 Seq Number:

Parent Sample Id:

Matrix: Soil MS Sample Id: 640269-001 S 640269-001

Prep Method:

SW8015P

Date Prep: 10.18.2019 MSD Sample Id: 640269-001 SD

Parent Spike MS MS MSD MSD Limits %RPD **RPD** Units Analysis Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date 10.18.2019 13:57 999 1070 107 20 Gasoline Range Hydrocarbons <15.0 1090 70-135 2 109 mg/kg 10.18.2019 13:57 Diesel Range Organics <15.0 999 1120 112 1170 117 70-135 4 20 mg/kg

MS MS MSD Limits Units MSD Analysis **Surrogate** Date %Rec Flag %Rec Flag 10.18.2019 13:57 1-Chlorooctane 107 110 70-135 % 10.18.2019 13:57 o-Terphenyl 114 116 70-135 %

Analytical Method: BTEX by SW 8260C

Seq Number: 3104847

Matrix: Solid

Prep Method:

SW5035A

Date Prep: 10.18.2019

LCS Sample Id: 7688512-1-BKS LCSD Sample Id: 7688512-1-BSD MB Sample Id: 7688512-1-BLK LCS %RPD RPD Units MB Spike LCS Limits Analysis LCSD LCSD **Parameter** Result %Rec Limit Date Result Amount %Rec Result

< 0.000207 10.18.2019 11:20 Benzene 0.0500 0.0445 89 0.0449 90 62-132 1 25 mg/kg 10.18.2019 11:20 Toluene < 0.00100 0.0500 0.0450 90 0.0454 91 66-124 1 25 mg/kg < 0.000336 71-134 mg/kg 10.18.2019 11:20 Ethylbenzene 0.0500 0.0468 94 0.0473 1 25 < 0.000437 0.0926 10.18.2019 11:20 0.100 93 0.0943 94 69-128 2 25 m,p-Xylenes mg/kg < 0.000985 10.18.2019 11:20 0.0500 0.0478 96 97 72-131 25 o-Xylene 0.0484 mg/kg

LCS MB MB LCS LCSD LCSD Limits Units Analysis Surrogate %Rec Flag %Rec Flag Date %Rec Flag 10.18.2019 11:20 Dibromofluoromethane 96 99 99 53-142 % 1,2-Dichloroethane-D4 101 101 104 53-150 % 10.18.2019 11:20 10.18.2019 11:20 Toluene-D8 101 106 107 70-130 %

SW5035A

### **QC Summary** 640304



# **Sport Environmental Services, LLC**

XTO Energy-NCT-2 #010

Analytical Method: BTEX by SW 8260C Prep Method: Seq Number: 3104847 Matrix: Soil Date Prep:

10.18.2019 MS Sample Id: 640134-019 S Parent Sample Id: 640134-019 MSD Sample Id: 640134-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.000205	0.0495	0.0446	90	0.0454	90	62-132	2	25	mg/kg	10.18.2019 12:11	
Toluene	< 0.000990	0.0495	0.0440	89	0.0444	88	66-124	1	25	mg/kg	10.18.2019 12:11	
Ethylbenzene	< 0.000332	0.0495	0.0451	91	0.0453	90	71-134	0	25	mg/kg	10.18.2019 12:11	
m,p-Xylenes	< 0.000432	0.0990	0.0900	91	0.0897	90	69-128	0	25	mg/kg	10.18.2019 12:11	
o-Xylene	< 0.000975	0.0495	0.0462	93	0.0463	92	72-131	0	25	mg/kg	10.18.2019 12:11	
				<b>*</b> C 1	MC		MC		• •,	TT- 14	A 1	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		103		53-142	%	10.18.2019 12:11
1,2-Dichloroethane-D4	107		105		53-150	%	10.18.2019 12:11
Toluene-D8	105		104		70-130	%	10.18.2019 12:11



# Chain of Custody

Work Order No: UHU3011

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296

		Hob	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	550) Phoenix,A	Z (480-3	55-0900	) Atlanta	,GA (77)	)-449-880	0) Tamp	a,FL (81	3-620-20	00)		\	ww.xer	www.xenco.com		Page	-	앜	1
roject Manager:	Debi Moore		Bil	Bill to: (if different)								Sinteres				Wor	k Orde	r Com	Work Order Comments			
ompany Name:	Sport Environmental Services, LLC	rvices, LLC	င္ပ	Company Name:		:							Program: UST/PST	n: UST,		₽ P	Q W	fields	_ Dwnfields RR☐	Su∏rfund	rfund	
	502 N Big Spring Street		Ad	Address:									Stat	State of Project:								
e ZIP:	Midland, TX 79701		Ci	City, State ZIP:									Reporting:Level II	յց:Leve		Vel III	<u>Ü</u>	F∏r/UST	₹ □	Lev V	Ą	
hone:	432-683-1100		Email: det	debi @sporteny.com	В	ciannar	cianna@sporteny.com	ту.сот	티	nt@sport	clint@sporteny.com		Deliverables: EDD	ıbles: E	B		ADaPT	PT		Other:		
roject Name:	XTO Energy - NCT-2 #010	)10	Tum	Turn Around						NALY	SIS RE	ANALYSIS REQUEST	7						×	rk Ord	Work Order Notes	es
91;	NCT -2 #010 (1R-5027)		Routine:													_		-				
			Rush: X							***************************************					<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>							
ampler's Name:	Clint Elliott		Due Date	Due Date: 10/22/19																		
SAMPLE RECEIPT	Temp Blank:	c Yes (No	Wet Ice:	S N N																		
emperature (°C):	187A		ᄛᆟ																			
eceived Intact:	(Yes)_ No			8																		
ooler Custody Seals:	\$	Corre	Correction Factor:															TA.	starts t	he day n	ecevied t	TAT starts the day recevied by the lab,
alliple cusiody deals.	NA COLUMN	lola	Total Collianiers.															Γ	=	eceived	received by 4:30pm	3
Sample Identification	fication Matrix	Date Sampled	Time Sampled	Depth	Numb	300_OI	8015B_ 8015B_	8260B											Sai	nple C	Sample Comments	nts
ICT-CP-CS NW @ 0-1'bgs	-1'bgs S	10/16/19	1110			×	×	×												From	From Field	
CT-CP-CS NW @ 5-6'bgs	-6'bgs S	10/16/19	1132			×	×	×												From	From Field	
ICT-CP-CS EF @ 6'bgs	ogs S	10/16/19	1135		-	×	×	×												From	From Field	
CT-CP-CS WW @ 0-1'bgs	)-1'bgs S	10/16/19	1109			×	×	×						_			_			From	From Field	
ICT-CP-CS WW @ 5-6'bgs	-6'bgs S	10/16/19	1131			×	×	×												Fron	From Field	
CT-CP-CS SW @ 0-1'bgs	-1'bgs S	10/16/19	1107		-	×	×	×												From	From Field	
CT-CP-CS SW @ 5-6'bgs	-6'bgs S	10/16/19	1133			×	×	×												Fron	From Field	
CT-CP-CS EW @ 0-1'bgs	-1'bgs S	10/16/19	1108			×	×	×												From	From Field	
CT-CP-CS EW @ 5-6'bgs	-6'bgs S	10/16/19	1130		<u> </u> -	<u> </u> *	×	×						-		-		-		Fron	From Field	
Total 200.7 / 6010	otal 200.7 / 6010 200.8 / 6020:		8RCRA 13	13PPM Texas 11	2 <del> </del>    -	Sb As	7 g    -	Se B	Cd Ca	S  -	- 0111	공		Mo	i K Se	<i></i> }	SiO2 Na	la Sr	Sr Tl Sn	<		
tice: Signature of this doc	olice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions	amples constitutes a	a valid purchase order from	er from client cor	mpany to	Xenco. it	s affiliate	s and sul	ates and subcontractors. It assigns	rs It ass	ons stan	is standard terms	ns and cond	nditions								
service. Xenco will be liab Xenco. A minimum charge	service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced under the control of th	and shall not assur ch project and a cha	ne any responsibility rge of \$5 for each s	y for any losses o ample submitted	r expense to Xenco	es incurr	ed by the analyzed	client if s . These te	client if such losses are due to circumstances beyond the c These terms will be enforced unless previously negotiated.	s are due e enforce	to circun d unless	circumstances beyond the control inless previously negotiated.	beyond t ly negotia	he contro	-							
Relinquished by: (Signature)	(Signature)	Received by:	oy: (Signature)			Date/Time	ne		Reling	Relinquished by	by: (Si	y: (Signature)	9)	7	Received by:	ed by	Signature)	ture)			Date/Time	ime
Clint Elliott UT 2	Jacare Smith		Y		10/16/	10/16/2019 @ 18:00	) 18:00	l	2 Jacare Smith	<b>)</b> 7	۲ ر	1				A				10/17/	10/17/2019 @	
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Revised Date 051418 Rev. 2018.1

IOS Number : **50357** 

Date/Time: 10.17.2019 Created by: Brianna Teel Please send report to: John Builes

Lab# From: Midland Delivery Priority: Address: 1211 W. Florida Ave

Lab# To: **Houston** Air Bill No.: 776750844752 E-Mail: john.builes@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
640304-001	S	NCT-CP- NW @ 0-1'B	10.16.2019 11:10	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-002	S	NCT-CP- NW @ 5-6 '	10.16.2019 11:32	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-003	S	NCT-CP- EF @ 6'BGS	10.16.2019 11:35	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-004	S	NCT-CP- WW @ 0-1'B	10.16.2019 11:09	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-005	S	NCT-CP- WW @ 5-6'	10.16.2019 11:31	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-006	S	NCT-CP- SW @ 0-1'B	10.16.2019 11:07	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-007	S	NCT-CP- SW @ 5-6'B	10.16.2019 11:33	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-008	S	NCT-CP- EW @ 0-1'B	10.16.2019 11:08	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	
640304-009	S	NCT-CP- EW @ 5-6'B	10.16.2019 11:30	SW8260CBTEX	BTEX by SW 8260C	10.21.2019	10.30.2019	JHB	BZ BZME EBZ XYLENE	

### **Inter Office Shipment or Sample Comments:**

Relinquished By:

Brianna Teel

Date Relinquished: 10.17.2019

Received By:

Travis Simmons

\_\_\_\_\_

Date Received: <u>10.18.2019</u>

Cooler Temperature: 2.0

# Received by OCD: 4/15/2020 4:22:24 PM XENCO LABORATORIES Into

### **XENCO Laboratories**



# Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 50357

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used: HOU-068

Date: 10.18.2019

Sent By: Brianna Teel Date Sent: 10.17.2019 02.16 PM Received By: Travis Simmons Date Received: 10.18.2019 09.30 AM Sample Receipt Checklist Comments 2 #1 \*Temperature of cooler(s)? Yes #2 \*Shipping container in good condition? #3 \*Samples received with appropriate temperature? Yes #4 \*Custody Seals intact on shipping container/ cooler? Yes #5 \*Custody Seals Signed and dated for Containers/coolers Yes #6 \*IOS present? Yes #7 Any missing/extra samples? No #8 IOS agrees with sample label(s)/matrix? Yes Yes #9 Sample matrix/ properties agree with IOS? #10 Samples in proper container/ bottle? Yes #11 Samples properly preserved? Yes #12 Sample container(s) intact? Yes #13 Sufficient sample amount for indicated test(s)? Yes #14 All samples received within hold time? Yes \* Must be completed for after-hours delivery of samples prior to placing in the refrigerator NonConformance: **Corrective Action Taken:** Nonconformance Documentation Contact: Contacted by: Date:

Checklist reviewed by:

### **XENCO Laboratories**

# Prelogin/Nonconformance Report- Sample Log-In

Client: Sport Environmental Services, LLC

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 10.17.2019 01.47.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 640304

Analyst:

Temperature Measuring device used: R8

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		2.3	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contai	ner/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?		N/A	
#6*Custody Seals Signed and dated?		N/A	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		Yes	Xenco Stafford-BTEX8260
#18 Water VOC samples have zero headsp	ace?	N/A	

* Must be completed for after-hours deliver	v of sample	es prior to	placing in t	he refrigerator
made be completed for ditor medic deniter	, o. oap.o	70 p 0 0	p.aog	

Checklist completed by:	Briuma Tud Brianna Teel	Date: 10.17.2019
Checklist reviewed by:	Sp	Date: 10.21.2019

John Builes

PH Device/Lot#:

Attachment H

Soil Boring Log

Boring Log / Field Notes **New Mexico NCT-2 #010** June 27, 2019

Rig Operator: Mr. David Lagoski (Operations Manager)

Rig Company: Harrison Cooper, Inc.

**SB-1**: 0-5 feet Tan Sand

5-20 feet Light Sand with Caliche

**SB-2-4:** Same Lithology as SB-1

# Attachment I

New Final Form C-141 (dated November 5, 2019)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible	Party XT	O Energy, Inc.			OGRID	5380	
Contact Nam	ne Mr. She	elby Pennington, I	Environmental Coor	dinator	Contact Te	elephone (281	1) 723-9353
Contact ema	il shelby_	pennington@xtoe	energy.com		Incident #	(assigned by OCD)	
Contact mail	ing address	6401 Holiday l	Hill Road, Midlan	d, TX 7	9707		
			Location	ı of R	elease So	ource	
Latitude		32.560940°			Longitude _		-103.284378°
			(NAD 83 in d	ecimal de	grees to 5 decim	al places)	
Site Name	New Mexico	C State NCT-2 #	<del>\$</del> 010		Site Type	Tank Battery	
Date Release	Discovered	12/7/2004			API# (if app	licable) 30-025	5-32691
Unit Letter	Section	Township	Range		Coun	ty	]
Н	19	20S	37E	Lea			
	Materia	ıl(s) Released (Select a		d Vol	ume of F	justification for the	volumes provided below)
Crude Oil		Volume Releas					vered (bbls) 25
Produced	Water	Volume Releas	. ,			Volume Reco	` '
		Is the concentrate produced water	tion of dissolved >10,000 mg/l?	chloride	e in the	Yes N	
Condensa	ite	Volume Releas	ed (bbls)			Volume Reco	vered (bbls)
Natural G	as	Volume Releas	ed (Mcf)			Volume Reco	vered (Mcf)
Other (de	scribe)	Volume/Weigh	t Released (provid	de units)		Volume/Weig	tht Recovered (provide units)
excavated an	that was cond dispose of	mpleted in 2004, " Fin the Environme	A total of 908 cul ental Plus, Inc. La	bic yard ndfarm	s of soil impa #NM-01-001	acted above the 3. Remedial Go	ge tank to overflow. Per the original NMOCD CoC remedial goals was oals achieved: TPH 8015m = 100 ne, and Xylenes = 50 mg/Kg.

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Was this a major	If YES, for what reason(s) does the respo	nsible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	More than 25 bbl of fluids were released.	
⊠ Yes □ No		
	ion was likely supplied by XTO at the time	nom? When and by what means (phone, email, etc)? e of the event. However, several years have passed since the release
	Initial R	esponse
The responsible p	party must undertake the following actions immediate	ly unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	we been contained via the use of berms or	likes, absorbent pads, or other containment devices.
-	ecoverable materials have been removed an	• ,
If all the actions described	d above have <u>not</u> been undertaken, explain	why:
1		
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
	nnington	Title: Environmental Coordinator
Signature: Shelk	by Pennington	Date:
email: shelby_pennington	@xtoenergy.com	Telephone: (281) 723-9353
OCD Only		
Received by:		Date:

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of New Mexico	
ervation Division	

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Application ID		

# **Site Assessment/Characterization**

What is the shallowest depth to groundwater beneath the area affected by the release?	35 (ft bgs)	
Did this release impact groundwater or surface water?	Yes 🛛 No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Yes 🛛 No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes 🛛 No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes 🛛 No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes 🛛 No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes 🛛 No	
Are the lateral extents of the release within 300 feet of a wetland?	Yes 🛛 No	
Are the lateral extents of the release overlying a subsurface mine?	Yes 🛛 No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes 🛛 No	
Are the lateral extents of the release within a 100-year floodplain?	Yes 🛛 No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	Yes 🗌 No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		

Characterization Report Checklist: Each of the following items must be included in the report.		
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>Photographs including date and GIS information</li> <li>Topographic/Aerial maps</li> <li>Laboratory data including chain of custody</li> </ul>		

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

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name: Shelby Pennington	Title: Environmental Coordinator	
Signature: Shelby Pennington email: shelby_pennington@xtoenergy.com	Date: 4/15/20	
email: shelby_pennington@xtoenergy.com	Telephone: (281) 723-9353	
OCD Only		
Received by:	Date:	

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Oil Conservation Division

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# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	e included in the plan.	
Detailed description of proposed remediation technique  Scaled sitemap with GPS coordinates showing delineation points  Estimated volume of material to be remediated  Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC  Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)		
Deferral Requests Only: Each of the following items must be co	nfirmed as part of any request for deferral of remediation	
Deterral Requests Only. Each of the following tiems must be co	njirmea as part of any request for aeferral of remeatation.	
Contamination must be in areas immediately under or around p deconstruction.	roduction equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human healt	h, the environment, or groundwater.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name:	Title:	
Signature:	Date:	
email:	Telephone:	
OCD Only		
Received by:	Date:	
☐ Approved ☐ Approved with Attached Conditions of	Approval	
Signature:	<u>Date:</u>	

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

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Incident ID	
District RP	
Facility ID	
Application ID	

# Closure

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

□ A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)	
☐ Description of remediation activities		
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete.  Title: Environmental Coordinator	
OCD Only		
Received by:	Date:	
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.	
Closure Approved by:	Date:	
Printed Name:	Title:	
<u> </u>		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 5001

### **CONDITIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	5001
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created By	Condition	Condition Date
jharimon	None	6/23/2022