



## **Seven Rivers Queen (1RP-5218)**



## **RELEASE CLOSURE REPORT**

Prepared by: Sport Environmental Services, LLC  
502 N. Big Spring St.  
Midland, TX 79701  
[www.sportenv.com](http://www.sportenv.com)

June 7, 2019



June 7, 2019

Mr. Jim Griswold  
Environmental Bureau Chief  
New Mexico Oil Conservation Division  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
jim.griswold@state.nm.us

**Re: Release Closure Report**  
**XTO Energy, Inc.**  
**Seven Rivers Queen**  
**RP #: 1R-5218**  
**API #: 30-025-08773**  
**Approximate Geographic Coordinates: 32.41861, -103.27083**  
**Unit Letter K, Section 4, Township 22S, Range 36E**  
**Lea County, New Mexico**

Mr. Griswold:

Sport Environmental Services, LLC is submitting a Release Closure Report on behalf of XTO Energy, Inc. (*XTO or Client*) for the Seven Rivers Queen (*subject site*) where a release of produced water along the injection line at this location occurred on September 13, 2018. The subject site, which was reported to be owned by Mack Operating, has unique characteristics as it is a caliche pit that was undergoing closure when the release occurred. The southern portion of the site appeared to have been blended and feathered once caliche extraction was no longer ongoing as part of the closure process. Following the confirmation sampling work described in this report, the site was again feathered to

The subject site appears to be under the jurisdiction of both the New Mexico Oil Conservation Division and the State Land Office. A site plan (**Attachment A**) is provided showing the approximate boundary separating the subject site into two (2) distinct portions. The north release path appears to be subject to New Mexico Oil Conservation Division (*NMOCD*) jurisdiction while the south release path, which is topographically down-gradient, would be subject to State Land Office (*SLO*) jurisdiction.

An Initial Form C-141 was submitted to NMOCD following the release and the agency assigned the release 1RP-5218 as an identifier. Both the Initial and Final C-141 Forms are available in **Attachment B**. SLO was also notified of the release upon its discovery and is aware of the unique challenges associated with addressing the release given that the southern release path (SRP) area is a caliche pit that was in the process of being closed out at the time the release occurred. Depth sampling in the SRP for site characterization was performed with an excavator that included rock teeth mounted to the bucket since the caliche made the use of direct-push technology infeasible and the slope of the site made use of a large air-rotary rig unsafe. Despite these limitations, Sport Environmental has been able to provide a characterization of the site that should account for the concentrations of relevant constituents of concern as demonstrated herein. A site plan showing the chloride concentrations associated with the greatest depth for which a soil sample was obtained at each sample point is provided in **Attachment C**.

## **BACKGROUND & SITE HISTORY**

On September 13, 2018, a Fiberflex injection line at the subject site developed a leak. This leak resulted in a release of approximately 865 barrels (bbl) of produced water which affected soil at the subject site -- a caliche pit which had been previously feathered to match existing topography in the area. The produced water flowed into this topographic depression (i.e., the former caliche source) which resulted in its containment. Approximately 660 bbl of produced water were recovered with a vacuum truck upon discovery of the release yielding a net loss of approximately 205 bbl of produced water at the subject site.

At the NMOCD's request, the client has provided a copy of the analysis of the source water to provide further detail regarding the quality of the produced water released (**Attachment D**). The relatively low concentration of Total Dissolved Solids (including sodium and chloride ions) is also suggested by the results of soil sampling which are discussed below. The client provided the best available data associated with the characteristics of this water which showed Total Dissolved Solids (TDS) concentrations in the water to be approximately 9,790 ppm. Chloride concentrations were approximately 5,045 ppm in the water associated with the source water from this release. Given that the depth to groundwater for this location is estimated to be greater than 100 feet based on a review of the New Mexico Office of the relevant State Engineer (NMOSE) databases (**Attachment E**), it appears that the closure criteria for the portion of this site that is subject to NMOCD jurisdiction would be 20,000 ppm with regard to chloride concentrations.

## **INITIAL SITE CHARACTERIZATION SOIL SAMPLING & ANALYTICAL RESULTS SUMMARY**

The Client's timely response and recovery efforts resulted in largely successful initial cleanup as indicated by the initial soil sampling performed by Sport Environmental Services, LLC (*Sport Environmental*) on September 18, 2018. This was further confirmed by Sport Environmental's efforts to provide improved site characterization data via horizontal and vertical delineation sampling performed on February 14, 2019 and February 20, 2019. For the February 14, 2019 sampling event a Geoprobe 540UD was utilized to conduct discrete depth soil sampling at portions of the NRP where use of a truck-mounted unit was possible. For those areas where use to the truck-mounted Geoprobe was unsafe or infeasible, a stainless-steel hand auger was utilized to obtain soil samples at the NRP areas. The layer of hard caliche made depth sampling with all available tools difficult and the depth of each sample point was ultimately determined by the point at which auger or equipment refusal was encountered. Horizontal Delineation Points (HDPs) associated with the NRP and SRP areas were also collected using the safest and most appropriate methods available based on site-specific conditions. Generally, the SRP sample points were conducted using an excavator with rock teeth that were mounted to the bucket. All soil samples were submitted to TestAmerica/Eurofins Scientific, a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory for analysis. A summary of results associated with this sampling is provided on the table that follows.

Table A: Delineation and Site Characterization Soil Sampling (February 2019)

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX			Total Petroleum Hydrocarbons (TPH)			Chloride	
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO (C28-C35) mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	Chloride mg/Kg
NRP-BG-001 @ 0-1' bgs 2/14/2019 9:27 AM								ND
NRP-BG-001 @ 2' bgs 2/14/2019 9:27 AM								ND
NRP-BG-001 @ 4' bgs 2/14/2019 9:30 AM	ND	ND	ND	ND	ND	ND	ND	ND
SRP-BG-001@ 0-1' bgs 2/14/2019 9:25 AM								ND
SRP-BG-001@ 2' bgs 2/14/2019 9:26 AM								ND
SRP-BG-001@ 4' bgs 2/14/2019 9:29 AM								ND
SRP-BG-001@ 8' bgs 2/14/2019 9:35 AM								ND
SRP-BG-001@ 10' bgs 2/14/2019 9:44 AM	ND	ND	ND	ND	ND	ND	ND	ND
NRP-SB-01-001 @ 0-1' bgs 2/14/2019 10:18 AM								ND
NRP-SB-01-001 @ 1.5' bgs 2/14/2019 10:21 AM	ND	ND	ND	ND	ND	38.0	67.2	36.6
NRP-SB-02-001 @ 0-1' bgs 2/14/2019 10:30 AM								ND
NRP-SB-02-001 @ 2' bgs 2/14/2019 10:36 AM	ND	ND	ND	ND	ND	3.93	ND	129
NRP-SB-03-001 @ 0-1' bgs 2/14/2019 10:44 AM	ND	ND	ND	ND	ND	8.10	3.52	ND
NRP-SB-04-001 @ 0-1' bgs 2/14/2019 10:55 AM								ND
NRP-SB-04-001 @ 1.5' bgs 2/14/2019 11:02 AM	ND	ND	ND	ND	ND	6.21	5.29	91.1
NRP-SB-05-001 @ 0-1' bgs 2/14/2019 11:10 AM								ND
NRP-SB-05-001 @ 1.75' bgs 2/14/2019 11:15 AM	ND	ND	ND	ND	ND	4.63	ND	54.3
NRP-SB-06-001 @ 0-1' bgs 2/14/2019 11:25 AM								ND
NRP-SB-06-001 @ 2' bgs 2/14/2019 11:29 AM								18.5
NRP-SB-06-001 @ 4' bgs 2/14/2019 11:36 AM								421

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX				Total Petroleum Hydrocarbons (TPH)			Chloride
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO (C28-C35) mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	Chloride mg/Kg
NRP-SB-06-001 @ 5.75' bgs 2/14/2019 12:08 PM	ND	ND	ND	ND	ND	2.53	ND	533
NRP-SB-07-001 @ 0-1' bgs 2/14/2019 12:21 PM								ND
NRP-SB-07-001 @ 2' bgs 2/14/2019 12:24 PM								ND
NRP-SB-07-001 @ 4' bgs 2/14/2019 12:30 PM	ND	ND	ND	ND	ND	4.2	ND	399
NRP-SB-08-001 @ 0-1' bgs 2/14/2019 12:45 PM								ND
NRP-SB-08-001 @ 2' bgs 2/14/2019 12:51 PM								108
NRP-SB-08-001 @ 4' bgs 2/14/2019 12:58 PM								252
NRP-SB-08-001 @ 8' bgs 2/14/2019 1:22 PM								49.3
NRP-SB-08-001 @ 9' bgs 2/14/2019 1:33 PM	ND	ND	ND	ND	ND	ND	ND	84.0
NRP-SB-09-001 @ 0-1' bgs 2/14/2019 1:46 PM								ND
NRP-SB-09-001 @ 2' bgs 2/14/2019 1:49 PM								27.8
NRP-SB-09-001 @ 3.5' bgs 2/14/2019 1:55 PM	ND	ND	ND	ND	ND	4.05	ND	357
NRP-SB-10-001 @ 0-1' bgs 2/14/2019 1:58 PM								ND
NRP-SB-10-001 @ 2' bgs 2/14/2019 1:58 PM								ND
NRP-SB-10-001 @ 3' bgs 2/14/2019 1:58 PM	ND	ND	ND	ND	ND	5.82	ND	172
NRP-SB-11-001 @ 0-1' bgs 2/14/2019 2:33 PM								ND
NRP-SB-11-001 @ 2' bgs 2/14/2019 2:33 PM	ND	ND	ND	ND	ND	ND	ND	214
NRP-SB-12-001 @ 0-1' bgs 2/14/2019 2:48 PM								ND
NRP-SB-12-001 @ 2' bgs 2/14/2019 2:48 PM	ND	ND	ND	ND	ND	ND	ND	446
NRP-SB-13-001 @ 0-1' bgs 2/14/2019 3:16 PM	ND	ND	ND	ND	ND	ND	ND	11.7

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX				Total Petroleum Hydrocarbons (TPH)			Chloride
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO [C28-C35] mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	
NRP-SB-14-001 @ 0-1' bgs 2/14/2019 3:31 PM	NS	NS	NS	NS	NS	NS	NS	176
SRP-SB-01-001 @ 0-1' bgs 2/14/2019 2:46 PM								ND
SRP-SB-01-001 @ 2' bgs 2/14/2019 2:47 PM								130
SRP-SB-01-001 @ 4' bgs 2/14/2019 2:51 PM								404
SRP-SB-01-001 @ 7' bgs 2/14/2019 3:02 PM	ND	ND	ND	ND	ND	ND	ND	440
SRP-SB-02-001 @ 0-1' bgs 2/14/2019 2:29 PM								ND
SRP-SB-02-001 @ 2' bgs 2/14/2019 2:30 PM								ND
SRP-SB-02-001 @ 4' bgs 2/14/2019 2:33 PM								379
SRP-SB-02-001 @ 6' bgs 2/14/2019 2:41 PM	ND	ND	ND	ND	ND	ND	ND	389
SRP-SB-03-001 @ 0-1' bgs 2/14/2019 3:07 PM								ND
SRP-SB-03-001 @ 2' bgs 2/14/2019 3:09 PM								ND
SRP-SB-03-001 @ 4' bgs 2/14/2019 3:10 PM								ND
SRP-SB-03-001 @ 8' bgs 2/14/2019 3:16 PM								63.3
SRP-SB-03-001 @ 10' bgs 2/14/2019 3:19 PM	ND	ND	ND	ND	ND	ND	ND	9.5
SRP-SB-04-001 @ 0-1' bgs 2/14/2019 1:44 PM								ND
SRP-SB-04-001 @ 2' bgs 2/14/2019 1:45 PM								ND
SRP-SB-04-001 @ 4' bgs 2/14/2019 1:46 PM								ND
SRP-SB-04-001 @ 8' bgs 2/14/2019 1:55 PM								27.7
SRP-SB-04-001 @ 11' bgs 2/14/2019 2:00 PM	ND	ND	ND	ND	ND	ND	ND	270
SRP-SB-05-001 @ 0-1' bgs 2/14/2019 12:44 PM								ND

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX				Total Petroleum Hydrocarbons (TPH)			Chloride mg/Kg
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO (C28-C35) mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	
SRP-SB-05-001 @ 2' bgs 2/14/2019 12:46 PM								ND
SRP-SB-05-001 @ 4' bgs 2/14/2019 12:49 PM								15.6
SRP-SB-05-001 @ 8' bgs 2/14/2019 1:14 PM								19.8
SRP-SB-05-001 @ 10' bgs 2/14/2019 1:22 PM	ND	ND	ND	ND	ND	ND	ND	224
SRP-SB-06-001 @ 0-1' bgs 2/14/2019 12:19 PM								ND
SRP-SB-06-001 @ 2' bgs 2/14/2019 12:20 PM								289
SRP-SB-06-001 @ 4' bgs 2/14/2019 12:22 PM								106
SRP-SB-06-001 @ 8' bgs 2/14/2019 12:31 PM								75.0
SRP-SB-06-001 @ 10' bgs 2/14/2019 12:34 PM	ND	0.00064	ND	ND	ND	ND	ND	15.4
SRP-SB-07-001 @ 0-1' bgs 2/14/2019 11:53 AM								ND
SRP-SB-07-001 @ 2' bgs 2/14/2019 11:55 AM								ND
SRP-SB-07-001 @ 4' bgs 2/14/2019 11:57 AM								82.9
490-168662-73								
SRP-SB-07-001 @ 8' bgs 2/14/2019 12:11 PM								14.1
SRP-SB-07-001 @ 9' bgs 2/14/2019 12:13 PM	ND	ND	ND	ND	ND	ND	ND	210
SRP-SB-08-001 @ 0-1' bgs 2/14/2019 11:32 AM								ND
SRP-SB-08-001 @ 2' bgs 2/14/2019 11:33 AM								ND
SRP-SB-08-001 @ 4' bgs 2/14/2019 11:36 AM								115
SRP-SB-08-001 @ 8' bgs 2/14/2019 11:50 AM	ND	ND	ND	ND	ND	ND	ND	12.2
SRP-SB-09-001 @ 0-1' bgs 2/14/2019 11:09 AM								ND
SRP-SB-09-001 @ 2' bgs 2/14/2019 11:11 AM								ND

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX				Total Petroleum Hydrocarbons (TPH)			Chloride
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO (C28-C35) mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	
SRP-SB-09-001 @ 4' bgs 2/14/2019 11:15 AM								24.5
SRP-SB-09-001 @ 8' bgs 2/14/2019 11:28 AM	ND	ND	ND	ND	ND	ND	ND	17.5
HDP-SB-01-001 @ 0-1'bgs 2/20/2019 7:30 AM								ND
HDP-SB-01-001 @ 2'bgs 2/20/2019 7:30 AM	NS	NS	NS	NS	NS	NS	NS	ND
HDP-SB-02-001 @ 0-1'bgs 2/20/2019 7:51 AM								ND
HDP-SB-02-001 @ 2'bgs 2/20/2019 7:57 AM	NS	NS	NS	NS	NS	NS	NS	ND
HDP-SB-03-001 @ 0-1'bgs 2/20/2019 8:12 AM								ND
HDP-SB-03-001 @ 1.5'bgs 2/20/2019 8:19 AM								ND
HDP-SB-04-001 @ 0-1'bgs 2/20/2019 8:29 AM								ND
HDP-SB-04-001 @ 2'bgs 2/20/2019 8:36 AM								ND
HDP-SB-04-001 @ 3'bgs 2/20/2019 8:42 AM	NS	NS	NS	NS	NS	NS	NS	ND
HDP-SB-05-001 @ 0-1'bgs 2/20/2019 9:04 AM								ND
HDP-SB-05-001 @ 2'bgs 2/20/2019 9:04 AM	NS	NS	NS	NS	NS	NS	NS	ND
HDP-SB-06-001 @ 0-1' bgs 2/14/2019 2:09 PM								ND
HDP-SB-06-001 @ 2' bgs 2/14/2019 2:11 PM								ND
HDP-SB-06-001 @ 4' bgs 2/14/2019 2:12 PM								ND
HDP-SB-06-001 @ 8' bgs 2/14/2019 2:20 PM								ND
HDP-SB-06-001 @ 11' bgs 2/14/2019 2:23 PM	ND	ND	ND	ND	ND	ND	ND	ND
HDP-SB-07-001 @ 0-1' bgs 2/14/2019 9:56 AM								ND
490-168662-89 HDP-SB-07-001 @ 2' bgs 2/14/2019 10:00 AM								ND

XTO Energy, Inc. - Seven Rivers Queen (1RP-5218) Delineation and Site Characterization Sampling								
Analyte Units	BTEX				Total Petroleum Hydrocarbons (TPH)			Chloride
	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes, Total mg/Kg	Gasoline Range Organics [C6 - C10] mg/Kg	MRO (C28-C35) mg/Kg	Diesel Range Organics [C10-C28] mg/Kg	Chloride mg/Kg
HDP-SB-07-001 @ 4' bgs 2/14/2019 10:01 AM								ND
HDP-SB-07-001 @ 8' bgs 2/14/2019 10:08 AM								ND
HDP-SB-07-001 @ 10' bgs 2/14/2019 10:12 AM	ND	ND	ND	ND	ND	ND	ND	ND
HDP-SB-08-001 @ 0-1' bgs 2/14/2019 3:23 PM								ND
HDP-SB-08-001 @ 2' bgs 2/14/2019 3:25 PM								ND
HDP-SB-08-001 @ 4' bgs 2/14/2019 3:27 PM								ND
HDP-SB-08-001 @ 7' bgs 2/14/2019 3:33 PM	ND	ND	ND	ND	ND	ND	ND	ND

**Notes:**  
ND = Not Detected  
NS = Not Sampled

A Site Plan and Sampling Diagram (**Attachment F**) is available for reference and includes the locations where sampling was performed at the subject site. In addition to the summary provided above, the full analytical results from these sampling events are included in **Attachment G**.

During the sampling event, samples were collected in accordance with proper sampling protocols to ensure representative characterization of soils submitted to TestAmerica/Eurofins Scientific 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. Since TPH and BTEX had been assessed in prior sampling shortly after the release occurred and were only present in concentrations far below their respective regulatory limits, if they were detected at all, the analysis of these constituents was limited to sampling at the location within each borehole with the highest concentration of chloride and the deepest sample point within an individual borehole. In a limited subset of samples, the environmental laboratory did not run the requested additional TPH and BTEX analyses. However, these constituents were not present or were well below their regulatory limits at all of the other points assessed and the subject site appeared to be homogeneous with regard to the limited TPH and BTEX impacts; therefore, resampling was not performed.

## GROUNDWATER & REMEDIATION CRITERIA

Groundwater depth is assumed to be greater than 100 feet below ground surface ('bgs) based on Sport Environmental's review of New Mexico Office of the State Engineer (NMOSE) data (please see previously mentioned **Attachment E**).

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 for the area associated with NMOCD jurisdiction (i.e., the north release path):

**Table B: §19.15.29 NMAC Table 1 Excerpt**

Closure Criteria for Soils Depth to Groundwater Greater than 100 feet below release boundary	
Chloride	20,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX ( <i>total</i> )	50 mg/kg
Benzene	10 mg/kg

The results of this sampling are compared within this report to the NMOCD's closure criteria concentrations as detailed in the table above. Based on a review of the data, affected soils would not be expected to have chloride concentrations in excess of 20,000 ppm. Neither the NRP nor the SRP showed detectable concentrations of Total Petroleum Hydrocarbons (TPH) or Benzene, Toluene, Ethylbenzene, Xylenes (collectively referred to as BTEX). Chloride concentrations at all of the confirmation sample points were less than the 600-ppm limit utilized by the NMOCD for delineation purposes.

## BORING & EXCAVATION LOGS

Given the homogenous nature of the subject site, soil characteristics did not vary significantly between boring or excavation sample points. Representative boring logs for the background sample location and select NRP and SRP sample points are provided in **Attachment H**.

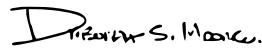
## PHOTOGRAPHIC LOG

A photographic log containing geotagged photographs of the subject site is provided as a supplement to this report (**Attachment I**).

## **CLOSURE REQUEST**

On behalf of XTO Energy, Inc., Sport Environmental requests that closure be granted for the release identified as 1R-5218 at the subject site. Thank you for granting an extension for the submittal of this report on account of the unique characteristics of this site as well as the transfer of this job between several NMOCD personnel. Should either agency have any further questions or comments regarding this report, please contact us at (432) 683-1100. Thank you for your consideration.

Sincerely,



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

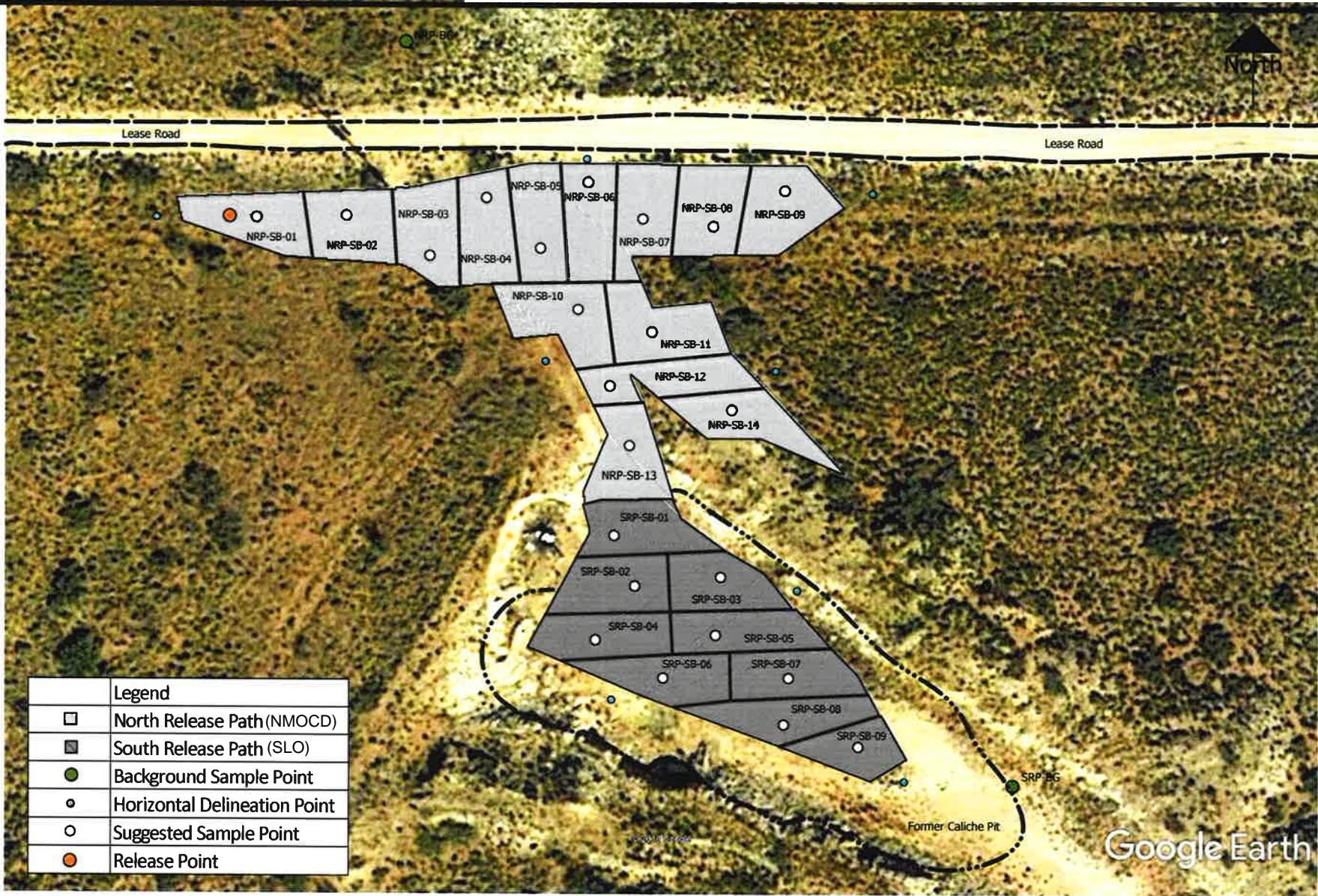
cc: Mr. Ryan Mann  
Hobbs District Resource Manager  
New Mexico State Land Office (SLO)  
2827 N. Dal Paso, Suite 117  
Hobbs, NM 88240  
rmann@slo.state.nm.us

Mr. Shelby Pennington (XTO Energy, Inc. – Environmental Supervisor)

List of Attachments:

- A      Site Plan
- B      Final C-141 Form and Initial C-141 Copy (originally submitted September of 2018)
- C      Site Plan with Depth and Chloride Concentration Data
- D      Source Water Analysis
- E      Groundwater Depth Data
- F      Site Plan and Soil Sampling Diagram
- G      Analytical Reports and Chain-of-Custody Forms
- H      Boring and Excavation Logs
- I      Photographic Log with Geotagged Photos

**Attachment A**  
**Site Plan**



**XTO Energy, Inc.  
Seven Rivers Queen Release (1RP-5218)**

**Lea County, New Mexico**

**SITE PLAN**

Latitude 32.41861 N      Longitude -103.27083 W

Author  
mlb

Drawing Date  
2-5-2019

Site Visit Date

**Attachment B  
Final C-141 and  
Initial C-141 Copy (originally submitted September of 2018)**

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	NOY1827453039
District RP	1RP-5218
Facility ID	
Application ID	pOY1827452324

## Release Notification

### Responsible Party

Responsible Party XTO Energy, Inc.	OGRID 5380
Contact Name Shelby Pennington, Environmental Supervisor	Contact Telephone (281) 723-9353
Contact email shelby_pennington@xtoenergy.com	Incident # (assigned by OCD) NOY1827453039
Contact mailing address 6401 Holiday Hill Road, Midland, TX 79707	

### Location of Release Source

Latitude 32.41861°N \_\_\_\_\_ Longitude -103.27083°W \_\_\_\_\_  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name Seven Rivers Queen	Site Type Injection line
Date Release Discovered September 13, 2018	API# (if applicable) 30-025-08773

Unit Letter	Section	Township	Range	County
K	4	22S	36E	Lea

State minerals

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Est. 865 bbl	Volume Recovered (bbls) 660 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

The release was caused when a Fiberflex injection line developed a leak. The exact cause is unknown at this time.

**State of New Mexico  
Oil Conservation Division**

Incident ID	NOY1827453039
District RP	1RP-5218
Facility ID	
Application ID	pOY1827452324

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? The volume of the release was estimated to be 865 bbl, with a recovered volume of 660 bbl, and a net loss of 205 bbl.  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc.)? Mr. Shelby Pennington, Environmental Supervisor with XTO Energy, made immediate initial release notification via email on 09-13-2018 to Ms. Olivia Yu, NMOCD. Mr. Jim Griswold, NMOCD Environmental Bureau Chief was also notified via email on 09-13-2018 due to the release size.	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
--

If all the actions described above have not been undertaken, explain why:

XTO Energy has performed initial response measures inclusive of leak isolation and recovery of all free fluids utilizing vacuum trucks.

A Hydrovac was utilized to locate the leak so XTO could move forward with line repairs. Excavated area has been fenced as a precautionary safety measure.

The release flowed to the topographic depression (i.e. caliche pit closure) resulting in its containment.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Shelby Pennington \_\_\_\_\_

Title: Environmental Supervisor \_\_\_\_\_

Signature: Shelby J Pennington

Date: 09-27-2018 \_\_\_\_\_

email: shelby\_pennington@xtoenergy.com \_\_\_\_\_

Telephone: (281) 723-9353 \_\_\_\_\_

#### **OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

**State of New Mexico  
Oil Conservation Division**

Incident ID	
District RP	
Facility ID	
Application ID	

## **Site Assessment/Characterization**

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities\*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Shelby Pennington Title: \_\_\_\_\_  
Signature: Shelby Pennington Date: 06/19/2019  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does it relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

\*Note: Since the produced water released had a relatively low concentration of chlorides (approximately 5,045 mg/L) as shown in the report and attached source water characterization document, remedial activities beyond the removal of free liquids and replacement of the affected soil near the leaking injection line were not applicable to this site. Confirmation sampling demonstrated that chloride concentrations in soil and caliche were less than the 20,000 mg/Kg limit applied to soils where the boundary of impact to groundwater is greater than 100 feet below ground surface. In addition, confirmation soil sampling also showed that concentrations of chlorides were less than the 600 mg/Kg limit utilized for delineation purposes at all locations sampled.

XTO Energy, Inc.  
Seven Rivers Queen – Injection Line Release 09-13-2018  
32.41861°N, -103.27083°W

### **Form C-141 Supplement**

The following additional assessment data is being provided as requested on page 2 of the NMOCD's new Form C-141 (rev. 09-2018) - *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.*

On behalf of XTO Energy, Sport Environmental Services, LLC (environmental consultant) performed additional assessment efforts at the release site on 09-18-2018. Attached please find a Release Impact Area Map that was generated with Garmin GPSMap 64st. The visual surface impact area was calculated to be 18,841 sq. ft. (0.43 acres) and is demarcated at the release site with white flags. Please refer to **Attachment A**.

In addition, site photographs and drone aerial imagery were also obtained of the release site on 09-18-2018. These images will provide a better understanding of the site and how the release path overlays a reported caliche pit closure consisting of disturbed, homogenous soils. Please refer to **Attachment B**.

Finally, initial site characterization was performed solely for the purpose of determining initial contamination depths and concentrations at the release site. A sample location map and associated analytical results are included within this supplement. Please refer to **Attachment C**.

# XTO Energy - 7 Rivers Queen

Produced Water Release Initial Impact Area

Mapped with Garmin GPSMap 64st

Approximate Location: 32.41861 , -103.27083

Google Earth Aerial Image Dated - 11-02-2017

## Legend

 Release Area - 18,841 sqft / 0.43 acres

Attachment A



N

Google Earth

© 2018 Google

100 ft

# Photographic Documentation Confirming Release Containment

Aerial Imagery Captured with DJI Phantom 4 Pro on September 18, 2018 (FAA Registration #: FA33CWXHMA)



XTO Energy, Inc.

Seven Rivers Queen (Produced Water Release)

**Attachment B**

**Release Point: 32.418682°, -103.270776°**

Release has been stopped and the area surrounding the excavation has been marked with caution tape.

# XTO Energy - 7 Rivers Queen

Produced Water Release - Initial Site Characterization

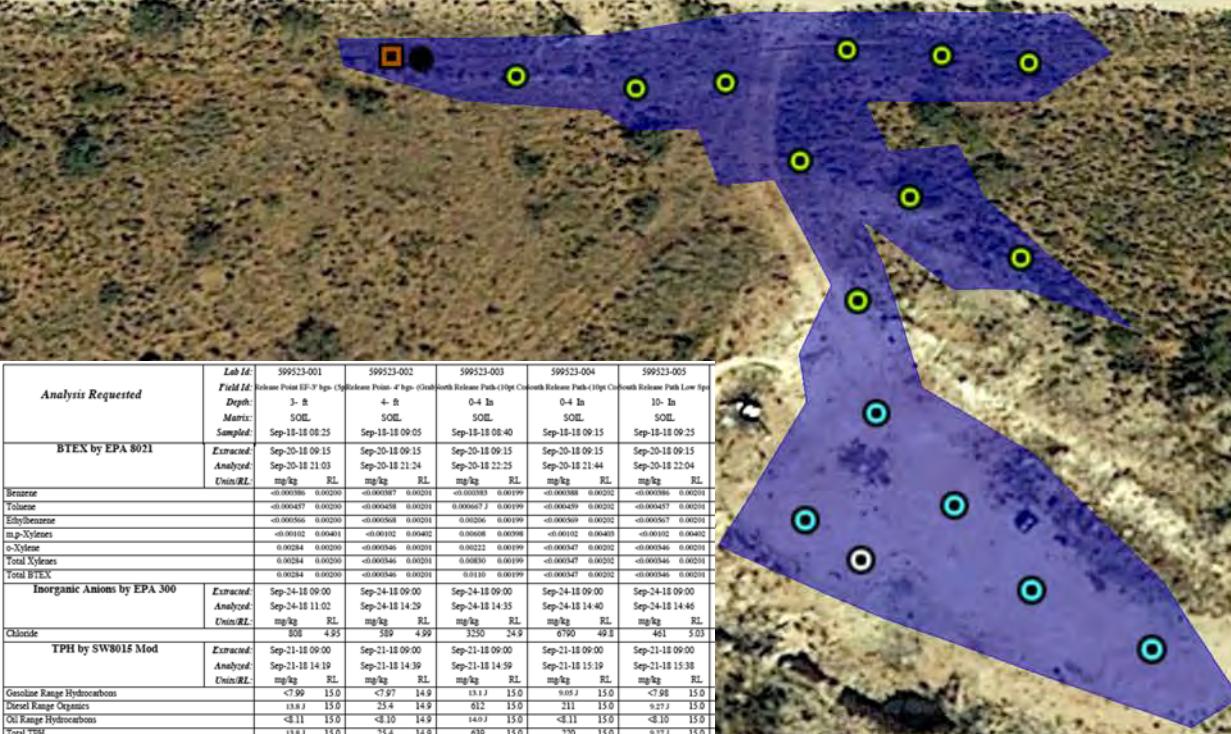
Approximate Location: 32.41861 , -103.27083

Google Earth Aerial Image Dated - 11-02-2017

## Attachment C

### Legend

- 7 Rivers Queen - Release Area - 18,841 sqft / 0.43 acres
- North Release Path - 10pt Comp.
- Release Point (4' bgs)
- Release Point EF - 5pt Comp. - (3' bgs)
- South Release Path - 5pt Comp.
- South Release Path Low Spot (10" bgs)



Google Earth

© 2018 Google

100 ft





# Certificate of Analysis Summary 599523

Sport Environmental Services, LLC, Midland, TX



Project Name: XTO Energy-7 Rivers Queen- Initial Release Characterization

Project Id: 8015  
Contact: Debi Moore  
Project Location: Lea County, New Mexico

Date Received in Lab: Wed Sep-19-18 09:35 am  
Report Date: 27-SEP-18  
Project Manager: Brandi Ritcherson

Analysis Requested		<i>Lab Id:</i>	599523-001	599523-002	599523-003	599523-004	599523-005				
		<i>Field Id:</i>	Release Point EF-3' bgs- (5p)	Release Point- 4' bgs- (Grab)	North Release Path-(10pt Co	South Release Path-(10pt Co	South Release Path Low Spo				
		<i>Depth:</i>	3- ft	4- ft	0-4 In	0-4 In	10- In				
		<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL				
		<i>Sampled:</i>	Sep-18-18 08:25	Sep-18-18 09:05	Sep-18-18 08:40	Sep-18-18 09:15	Sep-18-18 09:25				
<b>BTEX by EPA 8021</b>		<i>Extracted:</i>	Sep-20-18 09:15	Sep-20-18 09:15	Sep-20-18 09:15	Sep-20-18 09:15	Sep-20-18 09:15				
		<i>Analyzed:</i>	Sep-20-18 21:03	Sep-20-18 21:24	Sep-20-18 22:25	Sep-20-18 21:44	Sep-20-18 22:04				
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Benzene		<0.000386	0.00200	<0.000387	0.00201	<0.000383	0.00199	<0.000388	0.00202	<0.000386	0.00201
Toluene		<0.000457	0.00200	<0.000458	0.00201	0.000667 J	0.00199	<0.000459	0.00202	<0.000457	0.00201
Ethylbenzene		<0.000566	0.00200	<0.000568	0.00201	0.00206	0.00199	<0.000569	0.00202	<0.000567	0.00201
m,p-Xylenes		<0.00102	0.00401	<0.00102	0.00402	0.00608	0.00398	<0.00102	0.00403	<0.00102	0.00402
o-Xylene		0.00284	0.00200	<0.000346	0.00201	0.00222	0.00199	<0.000347	0.00202	<0.000346	0.00201
Total Xylenes		0.00284	0.00200	<0.000346	0.00201	0.00830	0.00199	<0.000347	0.00202	<0.000346	0.00201
Total BTEX		0.00284	0.00200	<0.000346	0.00201	0.0110	0.00199	<0.000347	0.00202	<0.000346	0.00201
<b>Inorganic Anions by EPA 300</b>		<i>Extracted:</i>	Sep-24-18 09:00	Sep-24-18 09:00	Sep-24-18 09:00	Sep-24-18 09:00	Sep-24-18 09:00				
		<i>Analyzed:</i>	Sep-24-18 11:02	Sep-24-18 14:29	Sep-24-18 14:35	Sep-24-18 14:40	Sep-24-18 14:46				
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		808	4.95	589	4.99	3250	24.9	6790	49.8	461	5.03
<b>TPH by SW8015 Mod</b>		<i>Extracted:</i>	Sep-21-18 09:00	Sep-21-18 09:00	Sep-21-18 09:00	Sep-21-18 09:00	Sep-21-18 09:00				
		<i>Analyzed:</i>	Sep-21-18 14:19	Sep-21-18 14:39	Sep-21-18 14:59	Sep-21-18 15:19	Sep-21-18 15:38				
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons		<7.99	15.0	<7.97	14.9	13.1 J	15.0	9.05 J	15.0	<7.98	15.0
Diesel Range Organics		13.8 J	15.0	25.4	14.9	612	15.0	211	15.0	9.27 J	15.0
Oil Range Hydrocarbons		<8.11	15.0	<8.10	14.9	14.0 J	15.0	<8.11	15.0	<8.10	15.0
Total TPH		13.8 J	15.0	25.4	14.9	639	15.0	220	15.0	9.27 J	15.0

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 - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brandi Ritcherson  
Project Manager

# **Analytical Report 599523**

**for**

## **Sport Environmental Services, LLC**

**Project Manager: Debi Moore**

**XTO Energy-7 Rivers Queen- Initial Release Characterization**

**27-SEP-18**

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)  
Xenco-Atlanta (LELAP Lab ID #04176)  
Xenco-Tampa: Florida (E87429)  
Xenco-Lakeland: Florida (E84098)

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27-SEP-18

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

Reference: XENCO Report No(s): **599523**  
**XTO Energy-7 Rivers Queen- Initial Release Characterization**  
Project Address: Lea County, New Mexico

**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) 599523. 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. 599523 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,



---

**Brandi Ritcherson**

Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 599523



**Sport Environmental Services, LLC, Midland, TX**

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Release Point EF-3' bgs- (5pt Comp.)	S	09-18-18 08:25	3 ft	599523-001
Release Point- 4' bgs- (Grab)	S	09-18-18 09:05	4 ft	599523-002
North Release Path-(10pt Comp)	S	09-18-18 08:40	0 - 4 In	599523-003
South Release Path-(10pt Comp)	S	09-18-18 09:15	0 - 4 In	599523-004
South Release Path Low Spot (Grab)	S	09-18-18 09:25	10 In	599523-005



## CASE NARRATIVE

**Client Name:** Sport Environmental Services, LLC  
**Project Name:** XTO Energy-7 Rivers Queen- Initial Release Characterization

Project ID: 8015  
Work Order Number(s): 599523

Report Date: 27-SEP-18  
Date Received: 09/19/2018

---

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:**

1.001 Corrected sample depth on sample 599523-005 to 10" per COC.

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

None

**Analytical non conformances and comments:**

Batch: LBA-3064013 BTEX by EPA 8021

Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Lab Sample ID 599457-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 599457-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Ethylbenzene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 599457-001, -002, -003, -004, -005, -006, -007, -008, -009, -010



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **Release Point EF-3' bgs- (5pt Comp.)** Matrix: Soil Date Received:09.19.18 09.35  
Lab Sample Id: 599523-001 Date Collected: 09.18.18 08.25 Sample Depth: 3 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P  
Tech: SCM % Moisture:  
Analyst: CHE Date Prep: 09.24.18 09.00 Basis: Wet Weight  
Seq Number: 3064242

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	808	4.95	0.850	mg/kg	09.24.18 11.02		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P  
Tech: ARM % Moisture:  
Analyst: ARM Date Prep: 09.21.18 09.00 Basis: Wet Weight  
Seq Number: 3064205

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<7.99	15.0	7.99	mg/kg	09.21.18 14.19	U	1
<b>Diesel Range Organics</b>	C10C28DRO	<b>13.8</b>	15.0	8.11	mg/kg	09.21.18 14.19	J	1
Oil Range Hydrocarbons	PHCG2835	<8.11	15.0	8.11	mg/kg	09.21.18 14.19	U	1
<b>Total TPH</b>	PHC635	<b>13.8</b>	15.0	7.99	mg/kg	09.21.18 14.19	J	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%		70-135	09.21.18 14.19		
o-Terphenyl	84-15-1	106	%		70-135	09.21.18 14.19		



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **Release Point EF-3' bgs- (5pt Comp.)** Matrix: Soil Date Received:09.19.18 09.35  
Lab Sample Id: 599523-001 Date Collected: 09.18.18 08.25 Sample Depth: 3 ft  
Analytical Method: BTEX by EPA 8021 Prep Method: SW5030B  
Tech: ALJ % Moisture:  
Analyst: ALJ Date Prep: 09.20.18 09.15 Basis: Wet Weight  
Seq Number: 3064013

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	09.20.18 21.03	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	09.20.18 21.03	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	09.20.18 21.03	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	09.20.18 21.03	U	1
<b>o-Xylene</b>	95-47-6	<b>0.00284</b>	0.00200	0.000345	mg/kg	09.20.18 21.03		1
<b>Total Xylenes</b>	1330-20-7	<b>0.00284</b>	0.00200	0.000345	mg/kg	09.20.18 21.03		1
<b>Total BTEX</b>		<b>0.00284</b>	0.00200	0.000345	mg/kg	09.20.18 21.03		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	154	%		70-130	09.20.18 21.03	**	
1,4-Difluorobenzene	540-36-3	94	%		70-130	09.20.18 21.03		



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

### XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **Release Point- 4' bgs- (Grab)** Matrix: **Soil** Date Received:09.19.18 09.35  
Lab Sample Id: 599523-002 Date Collected: 09.18.18 09.05 Sample Depth: 4 ft  
  
Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P  
Tech: SCM % Moisture:  
Analyst: CHE Date Prep: 09.24.18 09.00 Basis: Wet Weight  
Seq Number: 3064242

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>589</b>	4.99	0.857	mg/kg	09.24.18 14.29		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P  
Tech: ARM % Moisture:  
Analyst: ARM Date Prep: 09.21.18 09.00 Basis: Wet Weight  
Seq Number: 3064205

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<7.97	14.9	7.97	mg/kg	09.21.18 14.39	U	1
<b>Diesel Range Organics</b>	C10C28DRO	<b>25.4</b>	14.9	8.10	mg/kg	09.21.18 14.39		1
Oil Range Hydrocarbons	PHCG2835	<8.10	14.9	8.10	mg/kg	09.21.18 14.39	U	1
<b>Total TPH</b>	PHC635	<b>25.4</b>	14.9	7.97	mg/kg	09.21.18 14.39		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	105	%	70-135	09.21.18 14.39			
o-Terphenyl	84-15-1	107	%	70-135	09.21.18 14.39			



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **Release Point- 4' bgs- (Grab)**

Matrix: **Soil**

Date Received:09.19.18 09.35

Lab Sample Id: 599523-002

Date Collected: 09.18.18 09.05

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021

Prep Method: SW5030B

Tech: **ALJ**

% Moisture:

Analyst: **ALJ**

Date Prep: 09.20.18 09.15

Basis: **Wet Weight**

Seq Number: 3064013

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	09.20.18 21.24	U	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	09.20.18 21.24	U	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	09.20.18 21.24	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	09.20.18 21.24	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	09.20.18 21.24	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	09.20.18 21.24	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	09.20.18 21.24	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	154	%		70-130	09.20.18 21.24	**	
1,4-Difluorobenzene	540-36-3	91	%		70-130	09.20.18 21.24		



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

### XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **North Release Path-(10pt Comp)** Matrix: **Soil** Date Received:09.19.18 09.35  
Lab Sample Id: 599523-003 Date Collected: 09.18.18 08.40 Sample Depth: 0 - 4 In  
Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P  
Tech: **SCM** % Moisture:  
Analyst: **CHE** Date Prep: 09.24.18 09.00 Basis: **Wet Weight**  
Seq Number: 3064242

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
<b>Chloride</b>	16887-00-6	<b>3250</b>	24.9	4.27	mg/kg	09.24.18 14.35		5

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P  
Tech: **ARM** % Moisture:  
Analyst: **ARM** Date Prep: 09.21.18 09.00 Basis: **Wet Weight**  
Seq Number: 3064205

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
<b>Gasoline Range Hydrocarbons</b>	PHC610	<b>13.1</b>	15.0	8.00	mg/kg	09.21.18 14.59	J	1
<b>Diesel Range Organics</b>	C10C28DRO	<b>612</b>	15.0	8.13	mg/kg	09.21.18 14.59		1
<b>Oil Range Hydrocarbons</b>	PHCG2835	<b>14.0</b>	15.0	8.13	mg/kg	09.21.18 14.59	J	1
<b>Total TPH</b>	PHC635	<b>639</b>	15.0	8.00	mg/kg	09.21.18 14.59		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	109	%	70-135	09.21.18 14.59			
o-Terphenyl	84-15-1	120	%	70-135	09.21.18 14.59			



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **North Release Path-(10pt Comp)** Matrix: Soil Date Received:09.19.18 09.35  
Lab Sample Id: 599523-003 Date Collected: 09.18.18 08.40 Sample Depth: 0 - 4 In  
Analytical Method: BTEX by EPA 8021 Prep Method: SW5030B  
Tech: ALJ % Moisture:  
Analyst: ALJ Date Prep: 09.20.18 09.15 Basis: Wet Weight  
Seq Number: 3064013

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	09.20.18 22.25	U	1
Toluene	108-88-3	<b>0.000667</b>	0.00199	0.000454	mg/kg	09.20.18 22.25	J	1
Ethylbenzene	100-41-4	<b>0.00206</b>	0.00199	0.000563	mg/kg	09.20.18 22.25		1
m,p-Xylenes	179601-23-1	<b>0.00608</b>	0.00398	0.00101	mg/kg	09.20.18 22.25		1
o-Xylene	95-47-6	<b>0.00222</b>	0.00199	0.000343	mg/kg	09.20.18 22.25		1
Total Xylenes	1330-20-7	<b>0.00830</b>	0.00199	0.000343	mg/kg	09.20.18 22.25		1
<b>Total BTEX</b>		<b>0.0110</b>	0.00199	0.000343	mg/kg	09.20.18 22.25		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	86	%		70-130	09.20.18 22.25		
4-Bromofluorobenzene	460-00-4	129	%		70-130	09.20.18 22.25		



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **South Release Path-(10pt Comp)** Matrix: **Soil** Date Received:09.19.18 09.35  
Lab Sample Id: 599523-004 Date Collected: 09.18.18 09.15 Sample Depth: 0 - 4 In  
Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P  
Tech: **SCM** % Moisture:  
Analyst: **CHE** Date Prep: 09.24.18 09.00 Basis: **Wet Weight**  
Seq Number: 3064242

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
<b>Chloride</b>	16887-00-6	<b>6790</b>	49.8	8.55	mg/kg	09.24.18 14.40		10

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P  
Tech: **ARM** % Moisture:  
Analyst: **ARM** Date Prep: 09.21.18 09.00 Basis: **Wet Weight**  
Seq Number: 3064205

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
<b>Gasoline Range Hydrocarbons</b>	PHC610	<b>9.05</b>	15.0	7.99	mg/kg	09.21.18 15.19	J	1
<b>Diesel Range Organics</b>	C10C28DRO	<b>211</b>	15.0	8.11	mg/kg	09.21.18 15.19		1
Oil Range Hydrocarbons	PHCG2835	<8.11	15.0	8.11	mg/kg	09.21.18 15.19	U	1
<b>Total TPH</b>	PHC635	<b>220</b>	15.0	7.99	mg/kg	09.21.18 15.19		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	104	%	70-135	09.21.18 15.19			
o-Terphenyl	84-15-1	119	%	70-135	09.21.18 15.19			



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **South Release Path-(10pt Comp)** Matrix: **Soil** Date Received:09.19.18 09.35  
Lab Sample Id: 599523-004 Date Collected: 09.18.18 09.15 Sample Depth: 0 - 4 In  
Analytical Method: BTEX by EPA 8021 Prep Method: SW5030B  
Tech: ALJ % Moisture:  
Analyst: ALJ Date Prep: 09.20.18 09.15 Basis: Wet Weight  
Seq Number: 3064013

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	09.20.18 21.44	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	09.20.18 21.44	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	09.20.18 21.44	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	09.20.18 21.44	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	09.20.18 21.44	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	09.20.18 21.44	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	09.20.18 21.44	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%		70-130	09.20.18 21.44		
4-Bromofluorobenzene	460-00-4	153	%		70-130	09.20.18 21.44	**	

## Sport Environmental Services, LLC, Midland, TX

### XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **South Release Path Low Spot (Grab)** Matrix: **Soil** Date Received: 09.19.18 09.35  
 Lab Sample Id: 599523-005 Date Collected: 09.18.18 09.25 Sample Depth: 10 In

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

Tech: **SCM**

% Moisture:

Analyst: **CHE**

Date Prep: 09.24.18 09.00

Basis: **Wet Weight**

Seq Number: 3064242

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>461</b>	5.03	0.864	mg/kg	09.24.18 14.46		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P

Tech: **ARM**

% Moisture:

Analyst: **ARM**

Date Prep: 09.21.18 09.00

Basis: **Wet Weight**

Seq Number: 3064205

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<7.98	15.0	7.98	mg/kg	09.21.18 15.38	U	1
<b>Diesel Range Organics</b>	C10C28DRO	<b>9.27</b>	15.0	8.10	mg/kg	09.21.18 15.38	J	1
Oil Range Hydrocarbons	PHCG2835	<8.10	15.0	8.10	mg/kg	09.21.18 15.38	U	1
<b>Total TPH</b>	PHC635	<b>9.27</b>	15.0	7.98	mg/kg	09.21.18 15.38	J	1
<b>Surrogate</b>				<b>% Recovery</b>				
1-Chlorooctane		111-85-3		105	%	70-135	09.21.18 15.38	
o-Terphenyl		84-15-1		107	%	70-135	09.21.18 15.38	



# Certificate of Analytical Results 599523



## Sport Environmental Services, LLC, Midland, TX

XTO Energy-7 Rivers Queen- Initial Release Characterization

Sample Id: **South Release Path Low Spot (Grab)** Matrix: **Soil** Date Received: 09.19.18 09.35  
Lab Sample Id: 599523-005 Date Collected: 09.18.18 09.25 Sample Depth: 10 In  
Analytical Method: BTEX by EPA 8021 Prep Method: SW5030B  
Tech: ALJ % Moisture:  
Analyst: ALJ Date Prep: 09.20.18 09.15 Basis: Wet Weight  
Seq Number: 3064013

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	09.20.18 22.04	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	09.20.18 22.04	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	09.20.18 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	09.20.18 22.04	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	09.20.18 22.04	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	09.20.18 22.04	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	09.20.18 22.04	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	168		%	70-130	09.20.18 22.04	**	
1,4-Difluorobenzene	540-36-3	100		%	70-130	09.20.18 22.04		

- 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



## Sport Environmental Services, LLC

XTO Energy-7 Rivers Queen- Initial Release Characterization

Analytical Method: Inorganic Anions by EPA 300								Prep Method: E300P			
Seq Number:	3064242	Matrix: Solid				Date Prep: 09.24.18					
MB Sample Id:	7662842-1-BLK	LCS Sample Id: 7662842-1-BKS				LCSD Sample Id: 7662842-1-BSD					
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Chloride	<0.858	250	255	102	255	102	90-110	0	20	mg/kg	09.24.18 10:04

Analytical Method: Inorganic Anions by EPA 300								Prep Method: E300P			
Seq Number:	3064242	Matrix: Soil				Date Prep: 09.24.18					
Parent Sample Id:	599366-001	MS Sample Id: 599366-001 S				MSD Sample Id: 599366-001 SD					
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Chloride	<0.860	251	249	99	248	99	90-110	0	20	mg/kg	09.24.18 15:03

Analytical Method: Inorganic Anions by EPA 300								Prep Method: E300P			
Seq Number:	3064242	Matrix: Soil				Date Prep: 09.24.18					
Parent Sample Id:	599515-079	MS Sample Id: 599515-079 S				MSD Sample Id: 599515-079 SD					
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Chloride	47.2	250	325	111	325	111	90-110	0	20	mg/kg	09.24.18 10:29

Analytical Method: TPH by SW8015 Mod								Prep Method: TX1005P			
Seq Number:	3064205	Matrix: Solid				Date Prep: 09.21.18					
MB Sample Id:	7662829-1-BLK	LCS Sample Id: 7662829-1-BKS				LCSD Sample Id: 7662829-1-BSD					
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons	<8.00	1000	983	98	929	93	70-135	6	20	mg/kg	09.21.18 11:21
Diesel Range Organics	<8.13	1000	970	97	914	91	70-135	6	20	mg/kg	09.21.18 11:21
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits		Units		Analysis Date
1-Chlorooctane	113		127		118		70-135	%			09.21.18 11:21
o-Terphenyl	112		115		104		70-135	%			09.21.18 11:21

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)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

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



# QC Summary 599523

## Sport Environmental Services, LLC

XTO Energy-7 Rivers Queen- Initial Release Characterization

**Analytical Method: TPH by SW8015 Mod**

Seq Number:	3064205	Matrix:	Soil				Prep Method:	TX1005P		
Parent Sample Id:	599389-001	MS Sample Id:	599389-001 S				Date Prep:	09.21.18		
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Units</b>
Gasoline Range Hydrocarbons	<7.98	997	938	94	951	95	70-135	1	20	mg/kg
Diesel Range Organics	<8.10	997	960	96	977	98	70-135	2	20	mg/kg
<b>Surrogate</b>			<b>MS %Rec</b>	<b>MS Flag</b>	<b>MSD %Rec</b>	<b>MSD Flag</b>	<b>Limits</b>		<b>Units</b>	<b>Analysis Date</b>
1-Chlorooctane			124		124		70-135		%	09.21.18 12:20
o-Terphenyl			115		108		70-135		%	09.21.18 12:20

**Analytical Method: BTEX by EPA 8021**

Seq Number:	3064013	Matrix:	Solid				Prep Method:	SW5030B		
MB Sample Id:	7662760-1-BLK	LCS Sample Id:	7662760-1-BKS				Date Prep:	09.20.18		
<b>Parameter</b>	<b>MB Result</b>	<b>Spike Amount</b>	<b>LCS Result</b>	<b>LCS %Rec</b>	<b>LCSD Result</b>	<b>LCSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Units</b>
Benzene	<0.000388	0.101	0.0822	81	0.0881	88	70-130	7	35	mg/kg
Toluene	<0.000459	0.101	0.0841	83	0.0889	89	70-130	6	35	mg/kg
Ethylbenzene	<0.000569	0.101	0.0910	90	0.0954	95	70-130	5	35	mg/kg
m,p-Xylenes	<0.00102	0.202	0.178	88	0.186	93	70-130	4	35	mg/kg
o-Xylene	<0.000347	0.101	0.0870	86	0.0913	91	70-130	5	35	mg/kg
<b>Surrogate</b>	<b>MB %Rec</b>	<b>MB Flag</b>	<b>LCS %Rec</b>	<b>LCS Flag</b>	<b>LCSD %Rec</b>	<b>LCSD Flag</b>	<b>Limits</b>		<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene	95		98		94		70-130		%	09.20.18 09:42
4-Bromofluorobenzene	113		119		118		70-130		%	09.20.18 09:42

**Analytical Method: BTEX by EPA 8021**

Seq Number:	3064013	Matrix:	Soil				Date Prep:	09.20.18		
Parent Sample Id:	599457-001	MS Sample Id:	599457-001 S				MSD Sample Id:	599457-001 SD		
<b>Parameter</b>	<b>Parent Result</b>	<b>Spike Amount</b>	<b>MS Result</b>	<b>MS %Rec</b>	<b>MSD Result</b>	<b>MSD %Rec</b>	<b>Limits</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Units</b>
Benzene	<0.000386	0.100	0.0502	50	0.0494	29	70-130	2	35	mg/kg
Toluene	<0.000457	0.100	0.0449	45	0.0363	22	70-130	21	35	mg/kg
Ethylbenzene	<0.000566	0.100	0.0410	41	0.0274	16	70-130	40	35	mg/kg
m,p-Xylenes	<0.00102	0.200	0.0785	39	0.0521	15	70-130	40	35	mg/kg
o-Xylene	<0.000345	0.100	0.0387	39	0.0263	16	70-130	38	35	mg/kg
<b>Surrogate</b>			<b>MS %Rec</b>	<b>MS Flag</b>	<b>MSD %Rec</b>	<b>MSD Flag</b>	<b>Limits</b>		<b>Units</b>	<b>Analysis Date</b>
1,4-Difluorobenzene			91		93		70-130		%	09.20.18 10:22
4-Bromofluorobenzene			120		118		70-130		%	09.20.18 10:22

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)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

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



Setting the Standard since 1990  
Stafford, Texas (281-240-4200)

Dallas, Texas (214-902-0300)

# CHAIN OF CUSTODY

Page — Of —

San Antonio, Texas (210-509-3334)

Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

[www.xenco.com](http://www.xenco.com)

Xenco Quote #

Xenco Job #

599523

## Matrix Codes

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: <b>Sport Environmental</b>		Project Name/Number: XTO Energy - 7 Rivers Queen - Initial Release Characterization					
Company Address: 502 N Bell Spring Midland, Tx 79701		Project Location: Lea County, New Mexico					
Email: debi@sporternv.com		Phone No: (432) 683-1100		Invoice To: Sport Environmental Services, LLC			
Project Contact: <b>Debi Moore</b>		PO Number:					
Sampler's Name: <b>Clint Elliott</b>							
No.	Field ID / Point of Collection	Collection		Number of preserved bottles			
	Sample Depth	Date	Time	Matrix	# of bottles		
1	Release Point EF - 3' bgs - (5pt Comp.)	3 bgs	9/18/2018	0825	S	1	
2	Release Point - 4' bgs - (Grab)	4 bgs	9/18/2018	0905	S	1	
3	North Release Path - (10pt Comp)	0-4" bgs	9/18/2018	0840	S	1	
4	South Release Path - (5pt Comp)	0-4" bgs	9/18/2018	0915	S	1	
5	South Release Path Low Spot (Grab)	10" bgs	9/18/2018	0925	S	1	
6							
7							
8							
9							
10	Turnaround Time (Business days)			Data Deliverable Information		Notes:	
	<input type="checkbox"/> Same Day TAT	<input checked="" type="checkbox"/> 5 Day TAT		<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> Level IV (Full Data Pkg / raw data)		
	<input type="checkbox"/> Next Day EMERGENCY	<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms	<input type="checkbox"/> TRRP Level IV		
	<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> Contract TAT		<input type="checkbox"/> Level 3 (CLP Forms)	<input type="checkbox"/> UST / RG-411		
	<input type="checkbox"/> 3 Day EMERGENCY			<input type="checkbox"/> TRRP Checklist			
<b>TAT Starts Day received by Lab, if received by 5:00 pm</b>							
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY</b>							
1 Relinquished by: <i>C. Elliott</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>			
2 Relinquished by: <i>Debi Moore</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>			
3 Relinquished by: <i>Debi Moore</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>	Date Time: <i>9-19-18 0935</i>	Received By: <i>Debi Moore</i>			
4 Received By: <i>Debi Moore</i>	Custody Seal #	Preserved where applicable		On Ice			
5				5.8	0.0	0.0	0.0

Notice: 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 of 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 circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



**Client:** Sport Environmental Services, LLC

**Date/ Time Received:** 09/19/2018 09:35:00 AM

**Work Order #:** 599523

**Acceptable Temperature Range:** 0 - 6 degC  
**Air and Metal samples Acceptable Range:** Ambient  
**Temperature Measuring device used :** R8

<b>Sample Receipt Checklist</b>	<b>Comments</b>
#1 *Temperature of cooler(s)?	5.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	No
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

**Checklist completed by:** Katie Lowe Date: 09/19/2018  
Katie Lowe

**Checklist reviewed by:** Brandi Ritcherson Date: 09/20/2018  
Brandi Ritcherson

# Oil or Water Spill TO SOIL Volume Spreadsheet

Calculator Updated 11/17/2015

INPUT FIELDS
OUTPUT
RESULT

Location:	7 Rivers
GPS Coordinates:	
Spill Date:	9/13/2018
Spill Time:	12:00

Types of Soil	Porosity Factor
Gravel	0.25
Sand	0.20
Clay/silt/sand Mix	0.15
Clay	0.05
Caliche	0.03
Unknown	0.25

Length of Spill=		feet
Width of Spill=		feet
Saturation (or depth) of Spill=		inches

OR

Area=	17,300.00	ft <sup>2</sup>
Saturation (or depth) of Spill=	4.00	inches

OR

Soil Volume=		yd <sup>3</sup>
--------------	--	-----------------

Oil Cut=	-	% Oil
Porosity Factor=	0.20	

Soil Volume=	213.58	yd <sup>3</sup>
Total Oil in Soil=	-	barrels
Total Produced Water in Soil=	205.41	barrels

Volume Picked up	660.00	bbls
------------------	--------	------

**STEP 1**  
USED TO CALCULATE SOAK INTO THE GROUND. ONLY USE ONE METHOD

**STEP 2**  
INPUT OIL CUT AND POROSITY FROM ABOVE CHART

**STEP 3**  
INPUT VOLUME VAC TRUCK RECOVERED

## TOTAL VOLUME OF LEAK (SOAK AND RECOVERED)

Total Oil=	-	barrels
Total Produced Water=	865.41	barrels

## TOTAL VOLUME RECOVERED

Total Oil=	-	barrels
Total Produced Water=	660.00	barrels

## RRC NOTIFICATION REQUIREMENTS

OIL LEAK => 5 BBLS

WATER LEAK =>30 BBLS

Take Photos of spill before cleanup

Make Sketch of Spill Area

**Attachment C**  
**Site Plan with Depth and Chloride Concentration Data**

# XTO Energy, Inc - Seven Rivers Queen (1RP-5218)

Approximate Location: 32.41861, -103.27083 (Affected Area: approx. 18,841 square feet)  
Release of approximately 865 BBL of produced water with 660 BBL recovered. Net loss of approximately 205 BBL produced water on September 13, 2018. Produced water source had chloride concentrations less than 10,000 ppm.

North Release Path subject to NMOCD jurisdiction. South Release path subject to SLO.

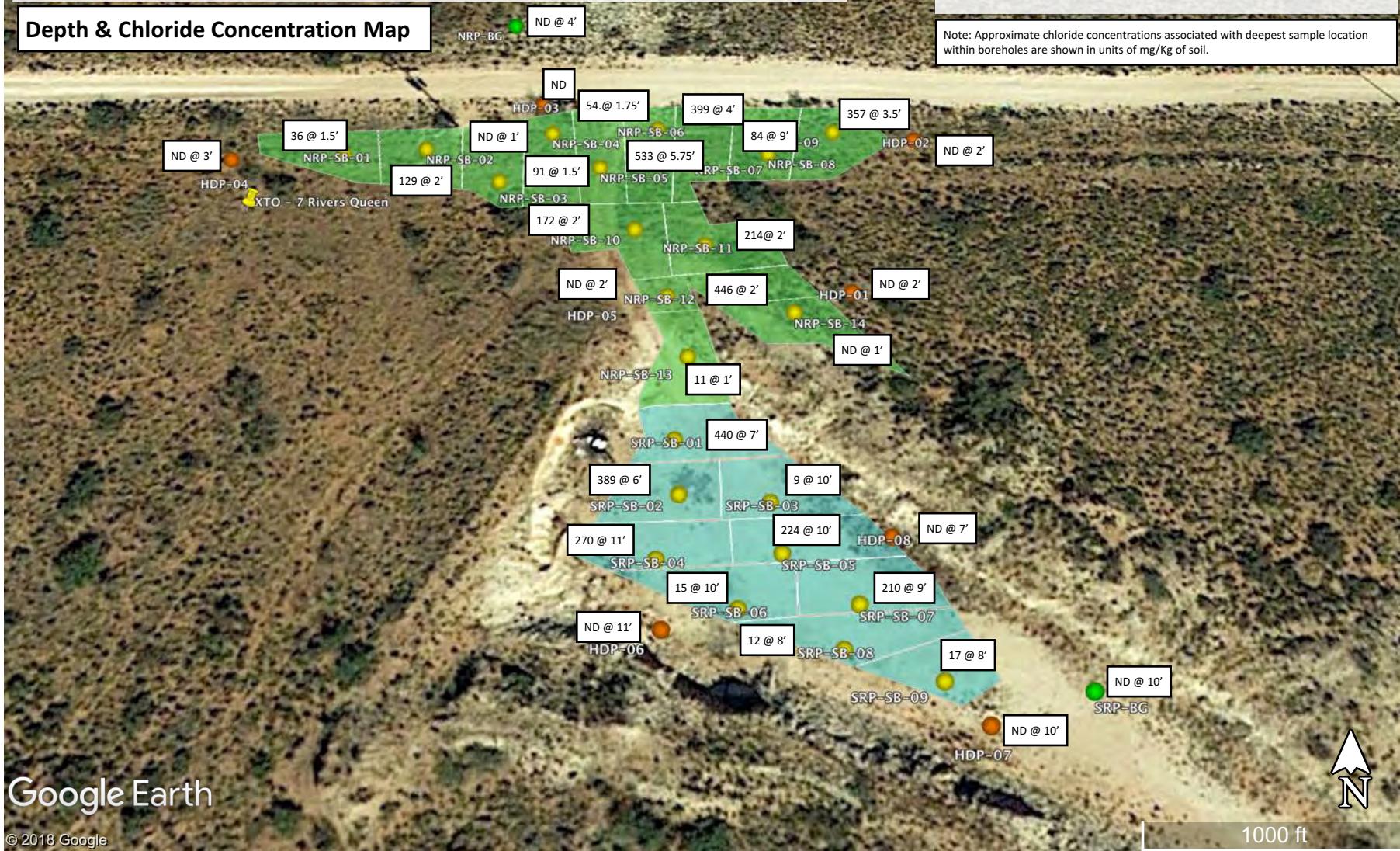
Aerial Imagery dated: August 10, 2016

## Legend

- Background Soil Boring
- Horizontal Delineation Point (HDP) Boring
- North Release Path (NRP) Affected Area
- Soil Boring
- South Release Path (SRP) Affected Area

Note: Approximate chloride concentrations associated with deepest sample location within boreholes are shown in units of mg/Kg of soil.

## Depth & Chloride Concentration Map



Google Earth

© 2018 Google

1000 ft

## Attachment D

### Source Water Analysis

# Complete Water Analysis Report

Customer: XTO ENERGY INC

Region: Eunice, NM

Location: Arrowhead Grayburg Unit (AGU)

System: Production System

Equipment: AGU-CTB

Sample Point: Injection Pump Discharge

Sample ID: AL22018

Acct Rep Email: Michael.McNatt@ecolab.com

Collection Date: 07/12/2018

Receive Date: 07/19/2018

Report Date: 07/20/2018

Location Code: 312414

## Field Analysis

Bicarbonate	817.4 mg/L	Dissolved CO2	370 mg/L	Dissolved H2S	461.7 mg/L
Pressure Surface	20 psi	Temperature	92 °F	pH of Water	7.7
Oil per Day	271 B/D	Gas per Day	0 Mcf/D	Water per Day	42817 B/D

## Sample Analysis

Calculated Gaseous CO2	0.11 %	Calculated pH	7.70	Conductivity (Calculated)	15298 µS - cm3
Ionic Strength	0.19	Resistivity	0.654 ohms - m	Specific Gravity	1.008
Total Dissolved Solids 9790.766 mg/L					

## Cations

Iron	0.136 mg/L	Manganese	0.011 mg/L	Barium	0.222 mg/L
Strontium	14.2 mg/L	Calcium	495 mg/L	Magnesium	204 mg/L
Sodium	2760.00 mg/L	Potassium	131 mg/L	Boron	2.75 mg/L
Lithium	Not Detected mg/L	Copper	0.004 mg/L	Nickel	Not Detected mg/L
Zinc	0.008 mg/L	Lead	0.041 mg/L	Cobalt	0.016 mg/L
Chromium	0.003 mg/L	Silicon	6.18 mg/L	Aluminum	0.025 mg/L
Molybdenum	0.002 mg/L	Phosphorus	0.172 mg/L		

## Anions

Bromide	13.613 mg/L	Chloride	5045 mg/L	Sulfate	454.679 mg/L
---------	-------------	----------	-----------	---------	--------------

## PTB Value

	Barite PTB	Calcite PTB	Celestite PTB	Gypsum PTB	Halite PTB	Iron Carbonate PTB	Iron Sulfide PTB	
50°	0.11	23.59	0.00	0.00	0.00	0.00	0.07	
75°	0.10	21.89	0.00	0.00	0.00	0.00	0.07	
100°	0.08	21.23	0.00	0.00	0.00	0.00	0.07	
125°	0.05	21.74	0.00	0.00	0.00	0.00	0.07	
150°	0.02	23.41	0.00	0.00	0.00	0.00	0.07	
175°	0.00	26.06	0.00	0.00	0.00	0.00	0.07	
200°	0.00	29.40	0.00	0.00	0.00	0.00	0.07	
225°	0.00	33.10	0.00	0.00	0.00	0.00	0.07	
250°	0.00	36.82	0.00	0.00	0.00	0.00	0.07	
275°	0.00	40.24	0.00	0.00	0.00	0.00	0.07	
300°	0.00	43.14	0.00	0.00	0.00	0.00	0.07	
325°	0.00	45.40	0.00	0.00	0.00	0.00	0.07	
350°	0.00	47.03	1.87	0.00	0.00	0.00	0.07	
375°	0.00	48.13	3.80	0.00	0.00	0.00	0.07	
400°	0.00	164.15	5.32	0.00	0.00	0.00	0.07	

## Saturation Index

	Barite SI	Calcite SI	Celestite SI	Gypsum SI	Halite SI	Iron Carbonate SI	Iron Sulfide SI	
50°	0.87	0.48	-0.72	-0.84	-3.56	-2.56	1.78	
75°	0.60	0.45	-0.75	-0.86	-3.61	-2.49	1.45	
100°	0.38	0.43	-0.75	-0.85	-3.64	-2.41	1.20	
125°	0.21	0.45	-0.71	-0.83	-3.65	-2.32	1.04	
150°	0.08	0.50	-0.66	-0.80	-3.66	-2.22	0.94	
175°	-0.02	0.57	-0.60	-0.78	-3.66	-2.11	0.90	
200°	-0.09	0.67	-0.60	-0.76	-3.65	-1.99	0.91	
225°	-0.14	0.80	-0.43	-0.75	-3.63	-1.87	0.96	
250°	-0.17	0.95	-0.34	-0.74	-3.62	-1.74	1.06	
275°	-0.19	1.12	-0.24	-0.73	-3.59	-1.60	1.18	
300°	-0.20	1.30	-0.13	-0.70	-3.56	-1.47	1.34	
325°	-0.20	1.50	-0.02	-0.63	-3.53	-1.33	1.51	
350°	-0.19	1.71	0.09	-0.52	-3.48	-1.20	1.71	
375°	-0.19	1.92	0.20	-0.33	-3.44	-1.07	1.92	
400°	-0.19	2.19	0.32	-0.04	-3.38	-0.72	1.79	

Scaling predictions calculated using Scale Soft Pitzer 2017

Scaling predictions dependent on provided field data. Incomplete/partial field data may impact results generated by scaling software.

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# Complete Water Analysis Report

Customer: XTO ENERGY INC

Region: Eunice, NM

Location: Arrowhead Grayburg Unit (AGU)

System: Production System

Equipment: AGU-CTB

Sample Point: Injection Pump Discharge

Sample ID: AL22018

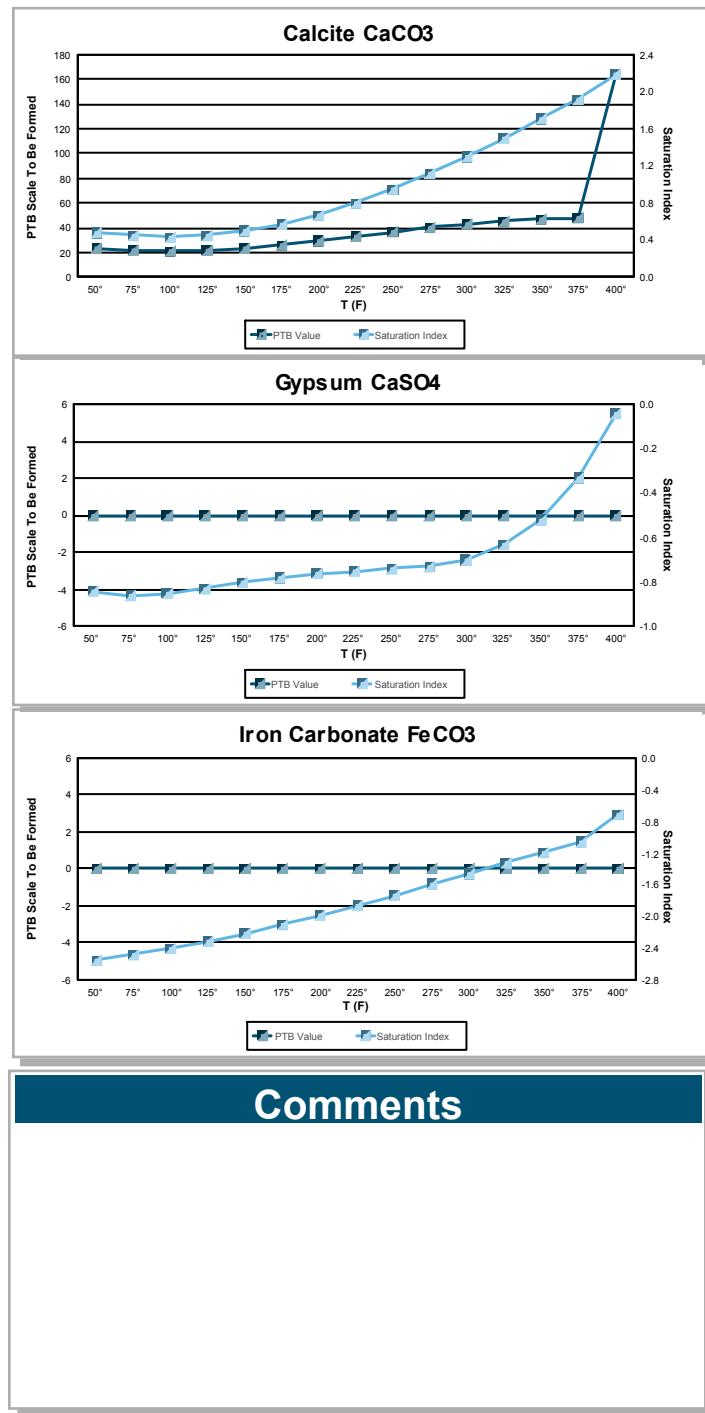
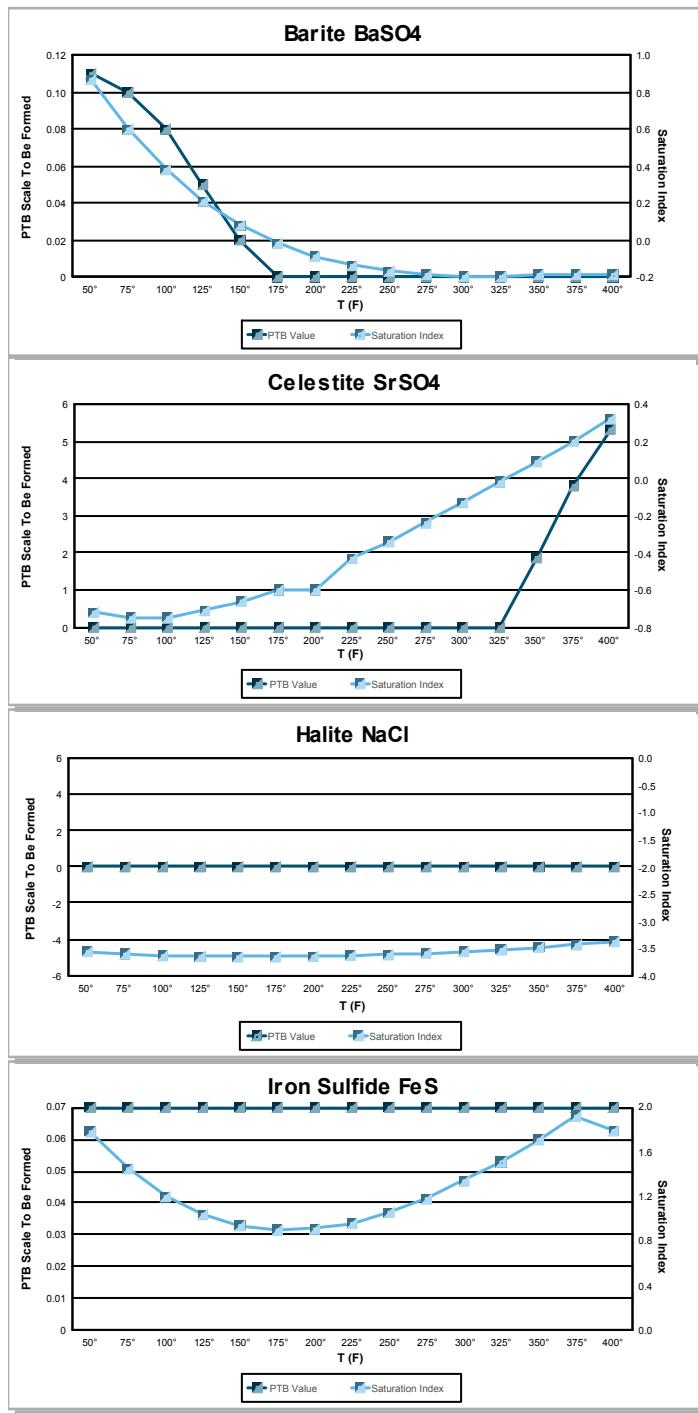
Acct Rep Email: Michael.McNatt@ecolab.com

Collection Date: 07/12/2018

Receive Date: 07/19/2018

Report Date: 07/20/2018

Location Code: 312414



Scaling predictions calculated using Scale Soft Pitzer 2017

Scaling predictions dependent on provided field data. Incomplete/partial field data may impact results generated by scaling software.

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07/24/2018

Page 2 of 2

**Attachment E**  
**Groundwater Depth Data**

**Seven Rivers Queen Release****1RP-5218**

Water Well ID	Lat	Long	Distance from Release (miles)	Drilled Date	DTW (ft)
CP 00727	32.423515	-103.286300	0.97	5/19/88	212
CP 00727 CL W475753	32.423515	-103.286300	0.97	4/26/88	--
L11013	32.402635	-103.257330	1.36	1/4/00	--
CP 01318 POD 2	32.400000	-103.259722	1.44	2/24/15	180
CP00070	32.390822	-103.271248	1.92	10/5/72	170
CP00070 CLW472929	32.390822	-103.271248	1.92	10/5/72	170
CP00764 POD 1	32.390835	-103.266975	1.93	7/1/91	4000

\* Query date - 11/28/2018

**Attachment F**  
**Site Plan and Soil Sampling Diagram**

# XTO Energy, Inc - Seven Rivers Queen (1RP-5218)

Approximate Location: 32.41861, -103.27083 (Affected Area: approx. 18,841 square feet)  
Release of approximately 865 BBL of produced water with 660 BBL recovered. Net loss of approximately 205 BBL produced water on September 13, 2018. Produced water source had chloride concentrations less than 10,000 ppm.

North Release Path subject to NMOCD jurisdiction. South Release path subject to SLO.

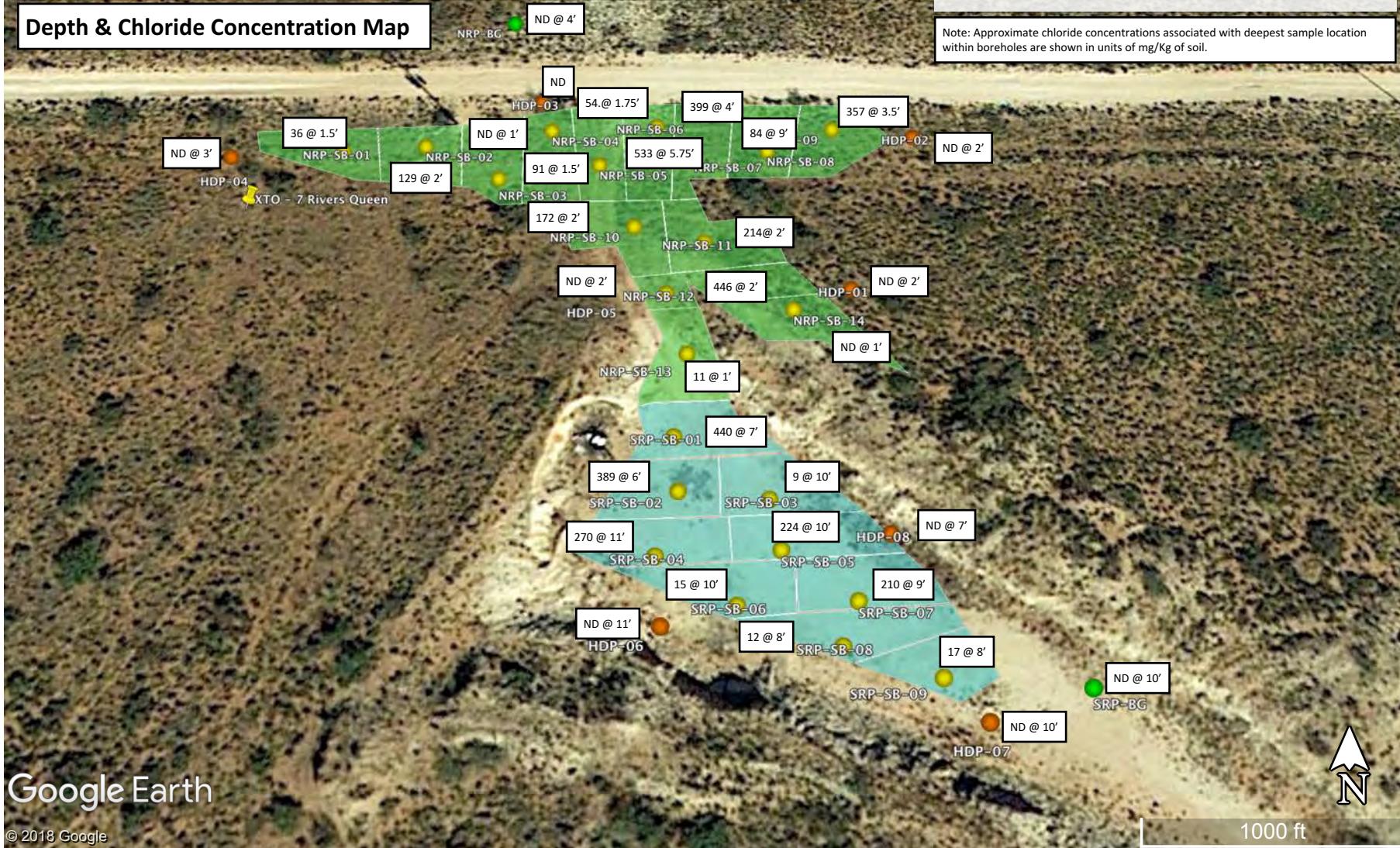
Aerial Imagery dated: August 10, 2016

## Legend

- Background Soil Boring
- Horizontal Delineation Point (HDP) Boring
- North Release Path (NRP) Affected Area
- Soil Boring
- South Release Path (SRP) Affected Area

Note: Approximate chloride concentrations associated with deepest sample location within boreholes are shown in units of mg/Kg of soil.

## Depth & Chloride Concentration Map



Google Earth

© 2018 Google

1000 ft

**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: 490-168662-1

Client Project/Site: XTO-Seven Rivers Queen

For:

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

Attn: Debi Sport Moore

Authorized for release by:

2/25/2019 4:30:51 PM

Jennifer Gambill, Project Manager I

(615)301-5044

jennifer.gambill@testamericainc.com

### LINKS

Review your project  
results through

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Have a Question?

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The  
Expert

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[www.testamericainc.com](http://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.

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# Sample Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-168662-1	NRP-BG-001 @ 0'-1' bgs	Solid	02/14/19 09:27	02/16/19 10:25
490-168662-2	NRP-BG-001 @ 2' bgs	Solid	02/14/19 09:27	02/16/19 10:25
490-168662-3	NRP-BG-001 @ 4' bgs	Solid	02/14/19 09:30	02/16/19 10:25
490-168662-4	SRP-BG-001@ 0-1' bgs	Solid	02/14/19 09:25	02/16/19 10:25
490-168662-5	SRP-BG-001@ 2' bgs	Solid	02/14/19 09:26	02/16/19 10:25
490-168662-6	SRP-BG-001@ 4' bgs	Solid	02/14/19 09:29	02/16/19 10:25
490-168662-7	SRP-BG-001@ 8' bgs	Solid	02/14/19 09:35	02/16/19 10:25
490-168662-8	SRP-BG-001@ 10' bgs	Solid	02/14/19 09:44	02/16/19 10:25
490-168662-9	NRP-SB-01-001 @ 0-1' bgs	Solid	02/14/19 10:18	02/16/19 10:25
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Solid	02/14/19 10:21	02/16/19 10:25
490-168662-11	NRP-SB-02-001 @ 0-1' bgs	Solid	02/14/19 10:30	02/16/19 10:25
490-168662-12	NRP-SB-02-001 @ 2' bgs	Solid	02/14/19 10:36	02/16/19 10:25
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Solid	02/14/19 10:44	02/16/19 10:25
490-168662-14	NRP-SB-04-001 @ 0-1' bgs	Solid	02/14/19 10:55	02/16/19 10:25
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Solid	02/14/19 11:02	02/16/19 10:25
490-168662-16	NRP-SB-05-001 @ 0-1' bgs	Solid	02/14/19 11:10	02/16/19 10:25
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Solid	02/14/19 11:15	02/16/19 10:25
490-168662-18	NRP-SB-06-001 @ 0-1' bgs	Solid	02/14/19 11:25	02/16/19 10:25
490-168662-19	NRP-SB-06-001 @ 2' bgs	Solid	02/14/19 11:29	02/16/19 10:25
490-168662-20	NRP-SB-06-001 @ 4' bgs	Solid	02/14/19 11:36	02/16/19 10:25
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Solid	02/14/19 12:08	02/16/19 10:25
490-168662-22	NRP-SB-07-001 @ 0-1' bgs	Solid	02/14/19 12:21	02/16/19 10:25
490-168662-23	NRP-SB-07-001 @ 2' bgs	Solid	02/14/19 12:24	02/16/19 10:25
490-168662-24	NRP-SB-07-001 @ 4' bgs	Solid	02/14/19 12:30	02/16/19 10:25
490-168662-25	NRP-SB-08-001 @ 0-1' bgs	Solid	02/14/19 12:45	02/16/19 10:25
490-168662-26	NRP-SB-08-001 @ 2' bgs	Solid	02/14/19 12:51	02/16/19 10:25
490-168662-27	NRP-SB-08-001 @ 4' bgs	Solid	02/14/19 12:58	02/16/19 10:25
490-168662-28	NRP-SB-08-001 @ 8' bgs	Solid	02/14/19 13:22	02/16/19 10:25
490-168662-29	NRP-SB-08-001 @ 9' bgs	Solid	02/14/19 13:33	02/16/19 10:25
490-168662-30	NRP-SB-09-001 @ 0-1' bgs	Solid	02/14/19 13:46	02/16/19 10:25
490-168662-31	NRP-SB-09-001 @ 2' bgs	Solid	02/14/19 13:49	02/16/19 10:25
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Solid	02/14/19 13:55	02/16/19 10:25
490-168662-33	NRP-SB-10-001 @ 0-1' bgs	Solid	02/14/19 13:18	02/16/19 10:25
490-168662-34	NRP-SB-10-001 @ 2' bgs	Solid	02/14/19 13:18	02/16/19 10:25
490-168662-35	NRP-SB-10-001 @ 3' bgs	Solid	02/14/19 13:18	02/16/19 10:25
490-168662-36	NRP-SB-11-001 @ 0-1' bgs	Solid	02/14/19 14:33	02/16/19 10:25
490-168662-37	NRP-SB-11-001 @ 2' bgs	Solid	02/14/19 14:33	02/16/19 10:25
490-168662-38	NRP-SB-12-001 @ 0-1' bgs	Solid	02/14/19 14:48	02/16/19 10:25
490-168662-39	NRP-SB-12-001 @ 2' bgs	Solid	02/14/19 14:48	02/16/19 10:25
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Solid	02/14/19 15:16	02/16/19 10:25
490-168662-42	SRP-SB-01-001 @ 0-1' bgs	Solid	02/14/19 14:46	02/16/19 10:25
490-168662-43	SRP-SB-01-001 @ 2' bgs	Solid	02/14/19 14:47	02/16/19 10:25
490-168662-44	SRP-SB-01-001 @ 4' bgs	Solid	02/14/19 14:51	02/16/19 10:25
490-168662-45	SRP-SB-01-001 @ 7' bgs	Solid	02/14/19 15:02	02/16/19 10:25
490-168662-46	SRP-SB-02-001 @ 0-1' bgs	Solid	02/14/19 14:29	02/16/19 10:25
490-168662-47	SRP-SB-02-001 @ 2' bgs	Solid	02/14/19 14:30	02/16/19 10:25
490-168662-48	SRP-SB-02-001 @ 4' bgs	Solid	02/14/19 14:33	02/16/19 10:25
490-168662-49	SRP-SB-02-001 @ 6' bgs	Solid	02/14/19 14:41	02/16/19 10:25
490-168662-50	SRP-SB-03-001 @ 0-1' bgs	Solid	02/14/19 15:07	02/16/19 10:25
490-168662-51	SRP-SB-03-001 @ 2' bgs	Solid	02/14/19 15:09	02/16/19 10:25
490-168662-52	SRP-SB-03-001 @ 4' bgs	Solid	02/14/19 15:10	02/16/19 10:25
490-168662-53	SRP-SB-03-001 @ 8' bgs	Solid	02/14/19 15:16	02/16/19 10:25
490-168662-54	SRP-SB-03-001 @ 10' bgs	Solid	02/14/19 15:19	02/16/19 10:25

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TestAmerica Nashville

# Sample Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-168662-55	SRP-SB-04-001 @ 0-1' bgs	Solid	02/14/19 13:44	02/16/19 10:25
490-168662-56	SRP-SB-04-001 @ 2' bgs	Solid	02/14/19 13:45	02/16/19 10:25
490-168662-57	SRP-SB-04-001 @ 4' bgs	Solid	02/14/19 13:46	02/16/19 10:25
490-168662-58	SRP-SB-04-001 @ 8' bgs	Solid	02/14/19 13:55	02/16/19 10:25
490-168662-59	SRP-SB-04-001 @ 11' bgs	Solid	02/14/19 14:00	02/16/19 10:25
490-168662-60	SRP-SB-05-001 @ 0-1' bgs	Solid	02/14/19 12:44	02/16/19 10:25
490-168662-61	SRP-SB-05-001 @ 2' bgs	Solid	02/14/19 12:46	02/16/19 10:25
490-168662-62	SRP-SB-05-001 @ 4' bgs	Solid	02/14/19 12:49	02/16/19 10:25
490-168662-63	SRP-SB-05-001 @ 8' bgs	Solid	02/14/19 13:14	02/16/19 10:25
490-168662-64	SRP-SB-05-001 @ 10' bgs	Solid	02/14/19 13:22	02/16/19 10:25
490-168662-65	SRP-SB-06-001 @ 0-1' bgs	Solid	02/14/19 12:19	02/16/19 10:25
490-168662-66	SRP-SB-06-001 @ 2' bgs	Solid	02/14/19 12:20	02/16/19 10:25
490-168662-67	SRP-SB-06-001 @ 4' bgs	Solid	02/14/19 12:22	02/16/19 10:25
490-168662-68	SRP-SB-06-001 @ 8' bgs	Solid	02/14/19 12:31	02/16/19 10:25
490-168662-69	SRP-SB-06-001 @ 10' bgs	Solid	02/14/19 12:34	02/16/19 10:25
490-168662-70	SRP-SB-07-001 @ 0-1' bgs	Solid	02/14/19 11:53	02/16/19 10:25
490-168662-71	SRP-SB-07-001 @ 2' bgs	Solid	02/14/19 11:55	02/16/19 10:25
490-168662-72	SRP-SB-07-001 @ 4' bgs	Solid	02/14/19 11:57	02/16/19 10:25
490-168662-73	SRP-SB-07-001 @ 8' bgs	Solid	02/14/19 12:11	02/16/19 10:25
490-168662-74	SRP-SB-07-001 @ 9' bgs	Solid	02/14/19 12:13	02/16/19 10:25
490-168662-75	SRP-SB-08-001 @ 0-1' bgs	Solid	02/14/19 11:32	02/16/19 10:25
490-168662-76	SRP-SB-08-001 @ 2' bgs	Solid	02/14/19 11:33	02/16/19 10:25
490-168662-77	SRP-SB-08-001 @ 4' bgs	Solid	02/14/19 11:36	02/16/19 10:25
490-168662-78	SRP-SB-08-001 @ 8' bgs	Solid	02/14/19 11:50	02/16/19 10:25
490-168662-79	SRP-SB-09-001 @ 0-1' bgs	Solid	02/14/19 11:09	02/16/19 10:25
490-168662-80	SRP-SB-09-001 @ 2' bgs	Solid	02/14/19 11:11	02/16/19 10:25
490-168662-81	SRP-SB-09-001 @ 4' bgs	Solid	02/14/19 11:15	02/16/19 10:25
490-168662-82	SRP-SB-09-001 @ 8' bgs	Solid	02/14/19 11:28	02/16/19 10:25
490-168662-83	HDP-SB-06-001 @ 0-1' bgs	Solid	02/14/19 14:09	02/16/19 10:25
490-168662-84	HDP-SB-06-001 @ 2' bgs	Solid	02/14/19 14:11	02/16/19 10:25
490-168662-85	HDP-SB-06-001 @ 4' bgs	Solid	02/14/19 14:12	02/16/19 10:25
490-168662-86	HDP-SB-06-001 @ 8' bgs	Solid	02/14/19 14:20	02/16/19 10:25
490-168662-87	HDP-SB-06-001 @ 11' bgs	Solid	02/14/19 14:23	02/16/19 10:25
490-168662-88	HDP-SB-07-001 @ 0-1' bgs	Solid	02/14/19 09:56	02/16/19 10:25
490-168662-89	HDP-SB-07-001 @ 2' bgs	Solid	02/14/19 10:00	02/16/19 10:25
490-168662-90	HDP-SB-07-001 @ 4' bgs	Solid	02/14/19 10:01	02/16/19 10:25
490-168662-91	HDP-SB-07-001 @ 8' bgs	Solid	02/14/19 10:08	02/16/19 10:25
490-168662-92	HDP-SB-07-001 @ 10' bgs	Solid	02/14/19 10:12	02/16/19 10:25
490-168662-93	HDP-SB-08-001 @ 0-1' bgs	Solid	02/14/19 15:23	02/16/19 10:25
490-168662-94	HDP-SB-08-001 @ 2' bgs	Solid	02/14/19 15:25	02/16/19 10:25
490-168662-95	HDP-SB-08-001 @ 4' bgs	Solid	02/14/19 15:27	02/16/19 10:25
490-168662-96	HDP-SB-08-001 @ 7' bgs	Solid	02/14/19 15:33	02/16/19 10:25

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TestAmerica Nashville

# Case Narrative

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## Job ID: 490-168662-1

### Laboratory: TestAmerica Nashville

#### Narrative

#### Job Narrative 490-168662-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/16/2019 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.6° C, 2.2° C and 2.4° C.

#### Receipt Exceptions

The following sample was listed on the Chain of Custody (COC); however, no sample was received: NRP-SB-14-001 @ 0-1' bgs (490-168662-41).

#### GC/MS VOA

Method(s) 8260B: Surrogate recovery for the following samples were outside control limits: SRP-SB-06-001 @ 10' bgs (490-168662-69), SRP-SB-07-001 @ 9' bgs (490-168662-74) and SRP-SB-08-001 @ 8' bgs (490-168662-78). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### HPLC/IC

Method(s) 300.0: The concentration of Chloride in the Matrix Spike/Matrix Spike Duplicate (MS/MSD) exceeded the calibration curve range. (490-168662-A-21-B MS) and (490-168662-A-21-C MSD)

Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: NRP-SB-06-001 @ 4' bgs (490-168662-20), NRP-SB-06-001 @ 5.75' bgs (490-168662-21), NRP-SB-07-001 @ 4' bgs (490-168662-24) and NRP-SB-12-001 @ 2' bgs (490-168662-39). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample was diluted due to the nature of the sample matrix: SRP-SB-06-001 @ 2' bgs (490-168662-66). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: SRP-SB-01-001 @ 4' bgs (490-168662-44) and SRP-SB-01-001 @ 7' bgs (490-168662-45). 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.

#### GC Semi VOA

Method(s) 8015B: The continuing calibration verification (CCV) associated with batch 490-576489 recovered above the upper control limit for C10-C28 and C18-C40. The following samples associated with this CCV were non-detects for the associated affected analytes; therefore, the data have been reported: SRP-SB-01-001 @ 7' bgs (490-168662-45), SRP-SB-03-001 @ 10' bgs (490-168662-54) and SRP-SB-05-001 @ 10' bgs (490-168662-64).

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: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### GC Semi VOA

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

#### HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
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)

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: 490-168662-1**

Matrix: Solid

Date Collected: 02/14/19 09:27

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.94	6.96	mg/Kg			02/19/19 09:47	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-BG-001 @ 2' bgs**

**Lab Sample ID: 490-168662-2**

Matrix: Solid

Date Collected: 02/14/19 09:27

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.85	6.90	mg/Kg			02/19/19 10:31	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-BG-001 @ 4' bgs**

**Lab Sample ID: 490-168662-3**

**Matrix: Solid**

Date Collected: 02/14/19 09:30

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00199	0.000666	mg/Kg		02/19/19 12:43	02/20/19 19:20	1
Ethylbenzene	ND		0.00199	0.000666	mg/Kg		02/19/19 12:43	02/20/19 19:20	1
Toluene	ND		0.00199	0.000736	mg/Kg		02/19/19 12:43	02/20/19 19:20	1
Xylenes, Total	ND		0.00596	0.00122	mg/Kg		02/19/19 12:43	02/20/19 19:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		70 - 130				02/19/19 12:43	02/20/19 19:20	1
4-Bromofluorobenzene (Surr)	97		70 - 130				02/19/19 12:43	02/20/19 19:20	1
Dibromofluoromethane (Surr)	122		70 - 130				02/19/19 12:43	02/20/19 19:20	1
Toluene-d8 (Surr)	91		70 - 130				02/19/19 12:43	02/20/19 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.55	2.28	mg/Kg		02/19/19 12:40	02/23/19 00:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	94		50 - 150				02/19/19 12:40	02/23/19 00:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.97	2.49	mg/Kg		02/19/19 14:18	02/22/19 04:35	1
MRO (C28-C35)	ND		4.97	2.49	mg/Kg		02/19/19 14:18	02/22/19 04:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	72		50 - 150				02/19/19 14:18	02/22/19 04:35	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg		02/19/19 10:46		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: 490-168662-4**

Matrix: Solid

Date Collected: 02/14/19 09:25

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.08	mg/Kg			02/19/19 11:01	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-BG-001@ 2' bgs**

**Lab Sample ID: 490-168662-5**

Matrix: Solid

Date Collected: 02/14/19 09:26  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.05	mg/Kg			02/19/19 11:16	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-BG-001@ 4' bgs**

**Lab Sample ID: 490-168662-6**

Matrix: Solid

Date Collected: 02/14/19 09:29  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.91	6.94	mg/Kg			02/19/19 11:30	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-BG-001@ 8' bgs**

**Lab Sample ID: 490-168662-7**

Matrix: Solid

Date Collected: 02/14/19 09:35

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.07	mg/Kg			02/19/19 11:45	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-BG-001@ 10' bgs**

**Lab Sample ID: 490-168662-8**

**Matrix: Solid**

Date Collected: 02/14/19 09:44

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00170	0.000569	mg/Kg		02/19/19 12:43	02/20/19 19:48	1
Ethylbenzene	ND		0.00170	0.000569	mg/Kg		02/19/19 12:43	02/20/19 19:48	1
Toluene	ND		0.00170	0.000628	mg/Kg		02/19/19 12:43	02/20/19 19:48	1
Xylenes, Total	ND		0.00509	0.00104	mg/Kg		02/19/19 12:43	02/20/19 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130	02/19/19 12:43	02/20/19 19:48	1
4-Bromofluorobenzene (Surr)	98		70 - 130	02/19/19 12:43	02/20/19 19:48	1
Dibromofluoromethane (Surr)	123		70 - 130	02/19/19 12:43	02/20/19 19:48	1
Toluene-d8 (Surr)	92		70 - 130	02/19/19 12:43	02/20/19 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.00	2.50	mg/Kg		02/19/19 12:40	02/23/19 01:01	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	96		50 - 150	02/19/19 12:40	02/23/19 01:01	1			

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/22/19 05:26	1
MRO (C28-C35)	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/22/19 05:26	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl (Surr)	81		50 - 150	02/19/19 14:18	02/22/19 05:26	1			

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.05	mg/Kg		02/19/19 12:00		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-01-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-9**

Matrix: Solid

Date Collected: 02/14/19 10:18

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.10	mg/Kg			02/19/19 12:15	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-01-001 @ 1.5' bgs**

**Lab Sample ID: 490-168662-10**

**Matrix: Solid**

Date Collected: 02/14/19 10:21

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.000662	mg/Kg		02/19/19 12:43	02/20/19 20:18	1
Ethylbenzene	ND		0.00198	0.000662	mg/Kg		02/19/19 12:43	02/20/19 20:18	1
Toluene	ND		0.00198	0.000731	mg/Kg		02/19/19 12:43	02/20/19 20:18	1
Xylenes, Total	ND		0.00593	0.00122	mg/Kg		02/19/19 12:43	02/20/19 20:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	110		70 - 130				02/19/19 12:43	02/20/19 20:18	1
4-Bromofluorobenzene (Surr)	104		70 - 130				02/19/19 12:43	02/20/19 20:18	1
Dibromofluoromethane (Surr)	125		70 - 130				02/19/19 12:43	02/20/19 20:18	1
Toluene-d8 (Surr)	94		70 - 130				02/19/19 12:43	02/20/19 20:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.79	2.39	mg/Kg		02/19/19 12:40	02/23/19 01:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 01:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	67.2		4.88	2.44	mg/Kg		02/19/19 14:18	02/22/19 05:42	1
MRO (C28-C35)	38.0		4.88	2.44	mg/Kg		02/19/19 14:18	02/22/19 05:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	56		50 - 150				02/19/19 14:18	02/22/19 05:42	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.6		9.96	6.97	mg/Kg		02/19/19 12:30		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-02-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-11**

**Matrix: Solid**

Date Collected: 02/14/19 10:30  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyst	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.87	6.91	mg/Kg			02/19/19 13:14	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-02-001 @ 2' bgs**

**Lab Sample ID: 490-168662-12**

**Matrix: Solid**

Date Collected: 02/14/19 10:36

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000656	mg/Kg		02/19/19 12:43	02/20/19 20:47	1
Ethylbenzene	ND		0.00196	0.000656	mg/Kg		02/19/19 12:43	02/20/19 20:47	1
Toluene	ND		0.00196	0.000724	mg/Kg		02/19/19 12:43	02/20/19 20:47	1
Xylenes, Total	ND		0.00587	0.00120	mg/Kg		02/19/19 12:43	02/20/19 20:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		70 - 130				02/19/19 12:43	02/20/19 20:47	1
4-Bromofluorobenzene (Surr)	99		70 - 130				02/19/19 12:43	02/20/19 20:47	1
Dibromofluoromethane (Surr)	120		70 - 130				02/19/19 12:43	02/20/19 20:47	1
Toluene-d8 (Surr)	94		70 - 130				02/19/19 12:43	02/20/19 20:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.63	2.31	mg/Kg		02/19/19 12:40	02/23/19 02:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 02:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.99	2.49	mg/Kg		02/19/19 14:18	02/22/19 05:59	1
MRO (C28-C35)	3.93	J	4.99	2.49	mg/Kg		02/19/19 14:18	02/22/19 05:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	67		50 - 150				02/19/19 14:18	02/22/19 05:59	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		9.92	6.94	mg/Kg		02/19/19 13:29		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-03-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-13**

**Matrix: Solid**

Date Collected: 02/14/19 10:44

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00185	0.000619	mg/Kg		02/19/19 12:43	02/20/19 21:16	1
Ethylbenzene	ND		0.00185	0.000619	mg/Kg		02/19/19 12:43	02/20/19 21:16	1
Toluene	ND		0.00185	0.000684	mg/Kg		02/19/19 12:43	02/20/19 21:16	1
Xylenes, Total	ND		0.00555	0.00114	mg/Kg		02/19/19 12:43	02/20/19 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	02/19/19 12:43	02/20/19 21:16	1
4-Bromofluorobenzene (Surr)	106		70 - 130	02/19/19 12:43	02/20/19 21:16	1
Dibromofluoromethane (Surr)	123		70 - 130	02/19/19 12:43	02/20/19 21:16	1
Toluene-d8 (Surr)	97		70 - 130	02/19/19 12:43	02/20/19 21:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.74	2.37	mg/Kg		02/19/19 12:40	02/23/19 02:42	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	93		50 - 150	02/19/19 12:40	02/23/19 02:42	1			

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.52	J	4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:16	1
MRO (C28-C35)	8.10		4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:16	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl (Surr)	87		50 - 150	02/19/19 14:18	02/22/19 06:16	1			

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.93	6.95	mg/Kg		02/19/19 13:44		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-04-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-14**

Matrix: Solid

Date Collected: 02/14/19 10:55  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.92	6.95	mg/Kg			02/19/19 13:59	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-04-001 @ 1.5' bgs**

**Lab Sample ID: 490-168662-15**

**Matrix: Solid**

Date Collected: 02/14/19 11:02

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000656	mg/Kg		02/19/19 12:43	02/20/19 21:46	1
Ethylbenzene	ND		0.00196	0.000656	mg/Kg		02/19/19 12:43	02/20/19 21:46	1
Toluene	ND		0.00196	0.000724	mg/Kg		02/19/19 12:43	02/20/19 21:46	1
Xylenes, Total	ND		0.00587	0.00120	mg/Kg		02/19/19 12:43	02/20/19 21:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		70 - 130				02/19/19 12:43	02/20/19 21:46	1
4-Bromofluorobenzene (Surr)	101		70 - 130				02/19/19 12:43	02/20/19 21:46	1
Dibromofluoromethane (Surr)	122		70 - 130				02/19/19 12:43	02/20/19 21:46	1
Toluene-d8 (Surr)	92		70 - 130				02/19/19 12:43	02/20/19 21:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.42	2.21	mg/Kg		02/19/19 12:40	02/23/19 03:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 03:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.29		4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:32	1
MRO (C28-C35)	6.21		4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	83		50 - 150				02/19/19 14:18	02/22/19 06:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.1		10.0	7.00	mg/Kg		02/19/19 14:14		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-05-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-16**

Matrix: Solid

Date Collected: 02/14/19 11:10  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.84	6.89	mg/Kg			02/19/19 14:28	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-05-001 @ 1.75' bgs**

**Lab Sample ID: 490-168662-17**

**Matrix: Solid**

Date Collected: 02/14/19 11:15

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000636	mg/Kg		02/19/19 12:43	02/20/19 22:15	1
Ethylbenzene	ND		0.00190	0.000636	mg/Kg		02/19/19 12:43	02/20/19 22:15	1
Toluene	ND		0.00190	0.000702	mg/Kg		02/19/19 12:43	02/20/19 22:15	1
Xylenes, Total	ND		0.00569	0.00117	mg/Kg		02/19/19 12:43	02/20/19 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 130	02/19/19 12:43	02/20/19 22:15	1
4-Bromofluorobenzene (Surr)	101		70 - 130	02/19/19 12:43	02/20/19 22:15	1
Dibromofluoromethane (Surr)	122		70 - 130	02/19/19 12:43	02/20/19 22:15	1
Toluene-d8 (Surr)	93		70 - 130	02/19/19 12:43	02/20/19 22:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.62	2.31	mg/Kg		02/19/19 12:40	02/23/19 03:49	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	93		50 - 150	02/19/19 12:40	02/23/19 03:49	1			

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:49	1
MRO (C28-C35)	4.63	J	4.94	2.47	mg/Kg		02/19/19 14:18	02/22/19 06:49	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl (Surr)	80		50 - 150	02/19/19 14:18	02/22/19 06:49	1			

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.3		9.98	6.99	mg/Kg		02/19/19 14:43		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-06-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-18**

Matrix: Solid

Date Collected: 02/14/19 11:25  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.08	mg/Kg			02/19/19 14:58	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-06-001 @ 2' bgs**

**Lab Sample ID: 490-168662-19**

Matrix: Solid

Date Collected: 02/14/19 11:29  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.5		10.1	7.04	mg/Kg			02/19/19 15:13	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-06-001 @ 4' bgs**

**Lab Sample ID: 490-168662-20**

**Matrix: Solid**

Date Collected: 02/14/19 11:36  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	421		19.8	13.9	mg/Kg			02/20/19 09:12	2

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-06-001 @ 5.75' bgs**

**Lab Sample ID: 490-168662-21**

**Matrix: Solid**

Date Collected: 02/14/19 12:08

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00194	0.000650	mg/Kg		02/19/19 12:51	02/20/19 22:46	1
Ethylbenzene	ND		0.00194	0.000650	mg/Kg		02/19/19 12:51	02/20/19 22:46	1
Toluene	ND		0.00194	0.000718	mg/Kg		02/19/19 12:51	02/20/19 22:46	1
Xylenes, Total	ND		0.00583	0.00119	mg/Kg		02/19/19 12:51	02/20/19 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	02/19/19 12:51	02/20/19 22:46	1
4-Bromofluorobenzene (Surr)	99		70 - 130	02/19/19 12:51	02/20/19 22:46	1
Dibromofluoromethane (Surr)	123		70 - 130	02/19/19 12:51	02/20/19 22:46	1
Toluene-d8 (Surr)	91		70 - 130	02/19/19 12:51	02/20/19 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.64	2.32	mg/Kg		02/19/19 13:47	02/23/19 04:23	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
a,a,a-Trifluorotoluene	97		50 - 150	02/19/19 13:47	02/23/19 04:23	1			

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.89	2.44	mg/Kg		02/19/19 14:18	02/22/19 07:06	1
MRO (C28-C35)	2.53	J	4.89	2.44	mg/Kg		02/19/19 14:18	02/22/19 07:06	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-Terphenyl (Surr)	79		50 - 150	02/19/19 14:18	02/22/19 07:06	1			

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	533		20.0	14.0	mg/Kg		02/20/19 09:27		2

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-07-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-22**

**Matrix: Solid**

Date Collected: 02/14/19 12:21  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.00	mg/Kg			02/19/19 18:10	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-07-001 @ 2' bgs**

**Lab Sample ID: 490-168662-23**

**Matrix: Solid**

Date Collected: 02/14/19 12:24  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.88	6.91	mg/Kg			02/19/19 18:25	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-07-001 @ 4' bgs**

**Lab Sample ID: 490-168662-24**

**Matrix: Solid**

Date Collected: 02/14/19 12:30

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00186	0.000622	mg/Kg		02/19/19 13:47	02/20/19 23:17	1
Ethylbenzene	ND		0.00186	0.000622	mg/Kg		02/19/19 13:47	02/20/19 23:17	1
Toluene	ND		0.00186	0.000686	mg/Kg		02/19/19 13:47	02/20/19 23:17	1
Xylenes, Total	ND		0.00557	0.00114	mg/Kg		02/19/19 13:47	02/20/19 23:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		70 - 130				02/19/19 13:47	02/20/19 23:17	1
4-Bromofluorobenzene (Surr)	100		70 - 130				02/19/19 13:47	02/20/19 23:17	1
Dibromofluoromethane (Surr)	123		70 - 130				02/19/19 13:47	02/20/19 23:17	1
Toluene-d8 (Surr)	93		70 - 130				02/19/19 13:47	02/20/19 23:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.61	2.31	mg/Kg		02/19/19 13:47	02/23/19 04:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	95		50 - 150				02/19/19 13:47	02/23/19 04:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.93	2.47	mg/Kg		02/19/19 14:18	02/22/19 07:56	1
MRO (C28-C35)	4.20	J	4.93	2.47	mg/Kg		02/19/19 14:18	02/22/19 07:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	74		50 - 150				02/19/19 14:18	02/22/19 07:56	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	399		20.1	14.0	mg/Kg		02/20/19 09:57		2

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-25**

Matrix: Solid

Date Collected: 02/14/19 12:45  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.95	6.97	mg/Kg			02/19/19 18:54	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 2' bgs**

**Lab Sample ID: 490-168662-26**

**Matrix: Solid**

Date Collected: 02/14/19 12:51  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		9.84	6.89	mg/Kg			02/19/19 19:09	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 4' bgs**

**Lab Sample ID: 490-168662-27**

**Matrix: Solid**

Date Collected: 02/14/19 12:58  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	252		10.1	7.04	mg/Kg			02/19/19 19:24	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 8' bgs**

**Lab Sample ID: 490-168662-28**

Matrix: Solid

Date Collected: 02/14/19 13:22  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.3		10.1	7.10	mg/Kg			02/19/19 19:39	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 9' bgs**

**Lab Sample ID: 490-168662-29**

**Matrix: Solid**

Date Collected: 02/14/19 13:33  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000657	mg/Kg		02/19/19 13:47	02/20/19 23:48	1
Ethylbenzene	ND		0.00196	0.000657	mg/Kg		02/19/19 13:47	02/20/19 23:48	1
Toluene	ND		0.00196	0.000725	mg/Kg		02/19/19 13:47	02/20/19 23:48	1
Xylenes, Total	ND		0.00588	0.00121	mg/Kg		02/19/19 13:47	02/20/19 23:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				02/19/19 13:47	02/20/19 23:48	1
4-Bromofluorobenzene (Surr)	97		70 - 130				02/19/19 13:47	02/20/19 23:48	1
Dibromofluoromethane (Surr)	128		70 - 130				02/19/19 13:47	02/20/19 23:48	1
Toluene-d8 (Surr)	92		70 - 130				02/19/19 13:47	02/20/19 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.27	2.14	mg/Kg		02/19/19 13:47	02/23/19 05:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	92		50 - 150				02/19/19 13:47	02/23/19 05:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.47	mg/Kg		02/19/19 14:18	02/22/19 08:13	1
MRO (C28-C35)	ND		4.95	2.47	mg/Kg		02/19/19 14:18	02/22/19 08:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	76		50 - 150				02/19/19 14:18	02/22/19 08:13	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.0		9.87	6.91	mg/Kg		02/19/19 19:53		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-09-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-30**

**Matrix: Solid**

Date Collected: 02/14/19 13:46

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.86	6.90	mg/Kg			02/19/19 20:08	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-09-001 @ 2' bgs**

**Lab Sample ID: 490-168662-31**

**Matrix: Solid**

Date Collected: 02/14/19 13:49  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.8		10.1	7.04	mg/Kg			02/19/19 20:53	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-09-001 @ 3.5' bgs**

**Lab Sample ID: 490-168662-32**

**Matrix: Solid**

Date Collected: 02/14/19 13:55

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.000665	mg/Kg		02/19/19 13:47	02/21/19 00:18	1
Ethylbenzene	ND		0.00198	0.000665	mg/Kg		02/19/19 13:47	02/21/19 00:18	1
Toluene	ND		0.00198	0.000734	mg/Kg		02/19/19 13:47	02/21/19 00:18	1
Xylenes, Total	ND		0.00595	0.00122	mg/Kg		02/19/19 13:47	02/21/19 00:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		70 - 130				02/19/19 13:47	02/21/19 00:18	1
4-Bromofluorobenzene (Surr)	101		70 - 130				02/19/19 13:47	02/21/19 00:18	1
Dibromofluoromethane (Surr)	123		70 - 130				02/19/19 13:47	02/21/19 00:18	1
Toluene-d8 (Surr)	92		70 - 130				02/19/19 13:47	02/21/19 00:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.84	2.42	mg/Kg		02/19/19 13:47	02/23/19 06:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	94		50 - 150				02/19/19 13:47	02/23/19 06:03	1

## Method: 8015B - Diesel Range Organics (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		02/19/19 14:18	02/22/19 08:30	1
MRO (C28-C35)	4.05	J	4.88	2.44	mg/Kg		02/19/19 14:18	02/22/19 08:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	77		50 - 150				02/19/19 14:18	02/22/19 08:30	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	357		10.0	7.03	mg/Kg		02/19/19 21:07		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-10-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-33**

**Matrix: Solid**

Date Collected: 02/14/19 13:18  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.87	6.91	mg/Kg			02/19/19 21:22	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-10-001 @ 2' bgs**

**Lab Sample ID: 490-168662-34**

Matrix: Solid

Date Collected: 02/14/19 13:18  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.05	mg/Kg			02/19/19 21:37	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-10-001 @ 3' bgs**

**Lab Sample ID: 490-168662-35**

**Matrix: Solid**

Date Collected: 02/14/19 13:18  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000669	mg/Kg		02/19/19 13:47	02/21/19 00:48	1
Ethylbenzene	ND		0.00200	0.000669	mg/Kg		02/19/19 13:47	02/21/19 00:48	1
Toluene	ND		0.00200	0.000739	mg/Kg		02/19/19 13:47	02/21/19 00:48	1
Xylenes, Total	ND		0.00599	0.00123	mg/Kg		02/19/19 13:47	02/21/19 00:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		70 - 130				02/19/19 13:47	02/21/19 00:48	1
4-Bromofluorobenzene (Surr)	100		70 - 130				02/19/19 13:47	02/21/19 00:48	1
Dibromofluoromethane (Surr)	126		70 - 130				02/19/19 13:47	02/21/19 00:48	1
Toluene-d8 (Surr)	93		70 - 130				02/19/19 13:47	02/21/19 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.31	2.16	mg/Kg		02/19/19 13:47	02/23/19 06:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		50 - 150				02/19/19 13:47	02/23/19 06:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.97	2.49	mg/Kg		02/19/19 14:18	02/22/19 08:47	1
MRO (C28-C35)	5.82		4.97	2.49	mg/Kg		02/19/19 14:18	02/22/19 08:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	70		50 - 150				02/19/19 14:18	02/22/19 08:47	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172		9.96	6.97	mg/Kg		02/19/19 21:52		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-11-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-36**

**Matrix: Solid**

Date Collected: 02/14/19 14:33

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.07	mg/Kg			02/19/19 22:07	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-11-001 @ 2' bgs**

**Lab Sample ID: 490-168662-37**

**Matrix: Solid**

Date Collected: 02/14/19 14:33

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00197	0.000659	mg/Kg		02/19/19 13:47	02/21/19 01:18	1
Ethylbenzene	ND		0.00197	0.000659	mg/Kg		02/19/19 13:47	02/21/19 01:18	1
Toluene	ND		0.00197	0.000728	mg/Kg		02/19/19 13:47	02/21/19 01:18	1
Xylenes, Total	ND		0.00591	0.00121	mg/Kg		02/19/19 13:47	02/21/19 01:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	106		70 - 130				02/19/19 13:47	02/21/19 01:18	1
4-Bromofluorobenzene (Surr)	97		70 - 130				02/19/19 13:47	02/21/19 01:18	1
Dibromofluoromethane (Surr)	122		70 - 130				02/19/19 13:47	02/21/19 01:18	1
Toluene-d8 (Surr)	93		70 - 130				02/19/19 13:47	02/21/19 01:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.74	2.37	mg/Kg		02/19/19 13:47	02/23/19 07:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		50 - 150				02/19/19 13:47	02/23/19 07:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.96	2.48	mg/Kg		02/19/19 16:17	02/21/19 13:23	1
MRO (C28-C35)	ND		4.96	2.48	mg/Kg		02/19/19 16:17	02/21/19 13:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	85		50 - 150				02/19/19 16:17	02/21/19 13:23	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	214		9.88	6.92	mg/Kg		02/19/19 22:22		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-12-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-38**

**Matrix: Solid**

Date Collected: 02/14/19 14:48  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.02	mg/Kg			02/19/19 22:37	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-12-001 @ 2' bgs**

**Lab Sample ID: 490-168662-39**

**Matrix: Solid**

Date Collected: 02/14/19 14:48  
 Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000658	mg/Kg		02/19/19 13:47	02/21/19 01:47	1
Ethylbenzene	ND		0.00196	0.000658	mg/Kg		02/19/19 13:47	02/21/19 01:47	1
Toluene	ND		0.00196	0.000727	mg/Kg		02/19/19 13:47	02/21/19 01:47	1
Xylenes, Total	ND		0.00589	0.00121	mg/Kg		02/19/19 13:47	02/21/19 01:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		70 - 130				02/19/19 13:47	02/21/19 01:47	1
4-Bromofluorobenzene (Surr)	97		70 - 130				02/19/19 13:47	02/21/19 01:47	1
Dibromofluoromethane (Surr)	122		70 - 130				02/19/19 13:47	02/21/19 01:47	1
Toluene-d8 (Surr)	91		70 - 130				02/19/19 13:47	02/21/19 01:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.75	2.38	mg/Kg		02/19/19 13:47	02/23/19 07:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		50 - 150				02/19/19 13:47	02/23/19 07:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.97	2.49	mg/Kg		02/19/19 16:17	02/21/19 13:40	1
MRO (C28-C35)	ND		4.97	2.49	mg/Kg		02/19/19 16:17	02/21/19 13:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	74		50 - 150				02/19/19 16:17	02/21/19 13:40	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	446		20.2	14.2	mg/Kg			02/20/19 10:12	2

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-13-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-40**

**Matrix: Solid**

Date Collected: 02/14/19 15:16

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00186	0.000623	mg/Kg		02/19/19 13:47	02/21/19 02:16	1
Ethylbenzene	ND		0.00186	0.000623	mg/Kg		02/19/19 13:47	02/21/19 02:16	1
Toluene	ND		0.00186	0.000688	mg/Kg		02/19/19 13:47	02/21/19 02:16	1
Xylenes, Total	ND		0.00558	0.00114	mg/Kg		02/19/19 13:47	02/21/19 02:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		70 - 130				02/19/19 13:47	02/21/19 02:16	1
4-Bromofluorobenzene (Surr)	96		70 - 130				02/19/19 13:47	02/21/19 02:16	1
Dibromofluoromethane (Surr)	123		70 - 130				02/19/19 13:47	02/21/19 02:16	1
Toluene-d8 (Surr)	95		70 - 130				02/19/19 13:47	02/21/19 02:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.53	2.26	mg/Kg		02/19/19 13:47	02/23/19 08:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	94		50 - 150				02/19/19 13:47	02/23/19 08:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.00	2.50	mg/Kg		02/19/19 16:17	02/21/19 14:32	1
MRO (C28-C35)	ND		5.00	2.50	mg/Kg		02/19/19 16:17	02/21/19 14:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	70		50 - 150				02/19/19 16:17	02/21/19 14:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.7		9.87	6.91	mg/Kg		02/19/19 23:06		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-01-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-42**

**Matrix: Solid**

Date Collected: 02/14/19 14:46  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.91	6.94	mg/Kg			02/20/19 12:10	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-01-001 @ 2' bgs**

**Lab Sample ID: 490-168662-43**

Matrix: Solid

Date Collected: 02/14/19 14:47  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10.0	7.03	mg/Kg			02/20/19 12:55	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-01-001 @ 4' bgs**

**Lab Sample ID: 490-168662-44**

Matrix: Solid

Date Collected: 02/14/19 14:51  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	404		49.5	34.7	mg/Kg			02/21/19 13:59	5

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-01-001 @ 7' bgs**

**Lab Sample ID: 490-168662-45**

**Matrix: Solid**

Date Collected: 02/14/19 15:02

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00199	0.000666	mg/Kg		02/19/19 12:43	02/21/19 02:44	1
Ethylbenzene	ND		0.00199	0.000666	mg/Kg		02/19/19 12:43	02/21/19 02:44	1
Toluene	ND		0.00199	0.000736	mg/Kg		02/19/19 12:43	02/21/19 02:44	1
Xylenes, Total	ND		0.00596	0.00122	mg/Kg		02/19/19 12:43	02/21/19 02:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				02/19/19 12:43	02/21/19 02:44	1
4-Bromofluorobenzene (Surr)	99		70 - 130				02/19/19 12:43	02/21/19 02:44	1
Dibromofluoromethane (Surr)	124		70 - 130				02/19/19 12:43	02/21/19 02:44	1
Toluene-d8 (Surr)	93		70 - 130				02/19/19 12:43	02/21/19 02:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.96	2.48	mg/Kg		02/19/19 12:40	02/23/19 08:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 08:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/21/19 05:08	1
MRO (C28-C35)	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/21/19 05:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	109		50 - 150				02/19/19 14:18	02/21/19 05:08	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		49.5	34.6	mg/Kg		02/21/19 14:14		5

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-02-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-46**

Matrix: Solid

Date Collected: 02/14/19 14:29  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.93	6.95	mg/Kg			02/20/19 13:39	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-02-001 @ 2' bgs**

**Lab Sample ID: 490-168662-47**

**Matrix: Solid**

Date Collected: 02/14/19 14:30  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.92	6.95	mg/Kg			02/20/19 13:54	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-02-001 @ 4' bgs**

**Lab Sample ID: 490-168662-48**

Matrix: Solid

Date Collected: 02/14/19 14:33  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	379		10.1	7.04	mg/Kg			02/20/19 14:09	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-02-001 @ 6' bgs**

**Lab Sample ID: 490-168662-49**

**Matrix: Solid**

Date Collected: 02/14/19 14:41  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00186	0.000622	mg/Kg		02/19/19 12:43	02/21/19 15:08	1
Ethylbenzene	ND		0.00186	0.000622	mg/Kg		02/19/19 12:43	02/21/19 15:08	1
Toluene	ND		0.00186	0.000686	mg/Kg		02/19/19 12:43	02/21/19 15:08	1
Xylenes, Total	ND		0.00557	0.00114	mg/Kg		02/19/19 12:43	02/21/19 15:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		70 - 130				02/19/19 12:43	02/21/19 15:08	1
4-Bromofluorobenzene (Surr)	98		70 - 130				02/19/19 12:43	02/21/19 15:08	1
Dibromofluoromethane (Surr)	118		70 - 130				02/19/19 12:43	02/21/19 15:08	1
Toluene-d8 (Surr)	94		70 - 130				02/19/19 12:43	02/21/19 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.94	2.47	mg/Kg		02/19/19 12:40	02/23/19 09:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		50 - 150				02/19/19 12:40	02/23/19 09:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:04	1
MRO (C28-C35)	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	82		50 - 150				02/19/19 14:18	02/22/19 09:04	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	389		10.0	7.01	mg/Kg		02/20/19 14:24		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-50**

**Matrix: Solid**

Date Collected: 02/14/19 15:07

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.03	mg/Kg			02/20/19 14:39	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 2' bgs**

**Lab Sample ID: 490-168662-51**

Matrix: Solid

Date Collected: 02/14/19 15:09  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.91	6.94	mg/Kg			02/20/19 14:54	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 4' bgs**

**Lab Sample ID: 490-168662-52**

**Matrix: Solid**

Date Collected: 02/14/19 15:10  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg			02/20/19 15:38	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 8' bgs**

**Lab Sample ID: 490-168662-53**

Matrix: Solid

Date Collected: 02/14/19 15:16  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.3		10.0	7.03	mg/Kg			02/20/19 15:53	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 10' bgs**

**Lab Sample ID: 490-168662-54**

**Matrix: Solid**

Date Collected: 02/14/19 15:19

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00182	0.000610	mg/Kg		02/19/19 12:43	02/21/19 15:38	1
Ethylbenzene	ND		0.00182	0.000610	mg/Kg		02/19/19 12:43	02/21/19 15:38	1
Toluene	ND		0.00182	0.000674	mg/Kg		02/19/19 12:43	02/21/19 15:38	1
Xylenes, Total	ND		0.00546	0.00112	mg/Kg		02/19/19 12:43	02/21/19 15:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	111		70 - 130				02/19/19 12:43	02/21/19 15:38	1
4-Bromofluorobenzene (Surr)	94		70 - 130				02/19/19 12:43	02/21/19 15:38	1
Dibromofluoromethane (Surr)	121		70 - 130				02/19/19 12:43	02/21/19 15:38	1
Toluene-d8 (Surr)	89		70 - 130				02/19/19 12:43	02/21/19 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.88	2.44	mg/Kg		02/19/19 12:40	02/23/19 09:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 09:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.95	2.47	mg/Kg		02/19/19 14:18	02/21/19 05:42	1
MRO (C28-C35)	ND		4.95	2.47	mg/Kg		02/19/19 14:18	02/21/19 05:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	108		50 - 150				02/19/19 14:18	02/21/19 05:42	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.50	J	10.1	7.04	mg/Kg			02/20/19 16:07	1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-55**

**Matrix: Solid**

Date Collected: 02/14/19 13:44  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.95	6.96	mg/Kg			02/20/19 16:22	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 2' bgs**

**Lab Sample ID: 490-168662-56**

Matrix: Solid

Date Collected: 02/14/19 13:45  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.96	6.97	mg/Kg			02/20/19 16:37	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 4' bgs**

**Lab Sample ID: 490-168662-57**

**Matrix: Solid**

Date Collected: 02/14/19 13:46  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.02	mg/Kg			02/20/19 16:52	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 8' bgs**

**Lab Sample ID: 490-168662-58**

**Matrix: Solid**

Date Collected: 02/14/19 13:55  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.7		10.0	7.01	mg/Kg			02/20/19 17:06	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 11' bgs**

**Lab Sample ID: 490-168662-59**

**Matrix: Solid**

Date Collected: 02/14/19 14:00

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00195	0.000652	mg/Kg		02/19/19 12:43	02/21/19 16:08	1
Ethylbenzene	ND		0.00195	0.000652	mg/Kg		02/19/19 12:43	02/21/19 16:08	1
Toluene	ND		0.00195	0.000720	mg/Kg		02/19/19 12:43	02/21/19 16:08	1
Xylenes, Total	ND		0.00584	0.00120	mg/Kg		02/19/19 12:43	02/21/19 16:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				02/19/19 12:43	02/21/19 16:08	1
4-Bromofluorobenzene (Surr)	93		70 - 130				02/19/19 12:43	02/21/19 16:08	1
Dibromofluoromethane (Surr)	121		70 - 130				02/19/19 12:43	02/21/19 16:08	1
Toluene-d8 (Surr)	93		70 - 130				02/19/19 12:43	02/21/19 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.46	2.23	mg/Kg		02/19/19 12:40	02/23/19 10:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		50 - 150				02/19/19 12:40	02/23/19 10:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.98	2.49	mg/Kg		02/19/19 14:18	02/22/19 09:21	1
MRO (C28-C35)	ND		4.98	2.49	mg/Kg		02/19/19 14:18	02/22/19 09:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	73		50 - 150				02/19/19 14:18	02/22/19 09:21	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		9.89	6.92	mg/Kg			02/20/19 17:21	1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-60**

Matrix: Solid

Date Collected: 02/14/19 12:44

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.91	6.94	mg/Kg			02/20/19 17:36	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 2' bgs**

**Lab Sample ID: 490-168662-61**

Matrix: Solid

Date Collected: 02/14/19 12:46  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg			02/20/19 17:51	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 4' bgs**

**Lab Sample ID: 490-168662-62**

**Matrix: Solid**

Date Collected: 02/14/19 12:49  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.6		10.0	7.03	mg/Kg			02/20/19 03:00	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 8' bgs**

**Lab Sample ID: 490-168662-63**

Matrix: Solid

Date Collected: 02/14/19 13:14  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.8		9.94	6.96	mg/Kg			02/20/19 03:50	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 10' bgs**

**Lab Sample ID: 490-168662-64**

**Matrix: Solid**

Date Collected: 02/14/19 13:22

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000658	mg/Kg		02/19/19 12:43	02/21/19 16:36	1
Ethylbenzene	ND		0.00196	0.000658	mg/Kg		02/19/19 12:43	02/21/19 16:36	1
Toluene	ND		0.00196	0.000727	mg/Kg		02/19/19 12:43	02/21/19 16:36	1
Xylenes, Total	ND		0.00589	0.00121	mg/Kg		02/19/19 12:43	02/21/19 16:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		70 - 130				02/19/19 12:43	02/21/19 16:36	1
4-Bromofluorobenzene (Surr)	98		70 - 130				02/19/19 12:43	02/21/19 16:36	1
Dibromofluoromethane (Surr)	127		70 - 130				02/19/19 12:43	02/21/19 16:36	1
Toluene-d8 (Surr)	91		70 - 130				02/19/19 12:43	02/21/19 16:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.73	2.37	mg/Kg		02/19/19 12:40	02/23/19 11:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/19/19 12:40	02/23/19 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/21/19 06:16	1
MRO (C28-C35)	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/21/19 06:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	115		50 - 150				02/19/19 14:18	02/21/19 06:16	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	224		9.86	6.90	mg/Kg			02/21/19 00:31	1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-65**

**Matrix: Solid**

Date Collected: 02/14/19 12:19  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.98	6.98	mg/Kg			02/20/19 04:06	1

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 2' bgs**

**Lab Sample ID: 490-168662-66**

Matrix: Solid

Date Collected: 02/14/19 12:20  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	289		20.2	14.1	mg/Kg			02/20/19 08:32	2

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 4' bgs**

**Lab Sample ID: 490-168662-67**

**Matrix: Solid**

Date Collected: 02/14/19 12:22  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		9.93	6.95	mg/Kg			02/20/19 04:40	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 8' bgs**

**Lab Sample ID: 490-168662-68**

Matrix: Solid

Date Collected: 02/14/19 12:31  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.0		9.89	6.92	mg/Kg			02/20/19 04:56	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 10' bgs**

**Lab Sample ID: 490-168662-69**

**Matrix: Solid**

Date Collected: 02/14/19 12:34

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00167	0.000559	mg/Kg		02/18/19 13:24	02/18/19 16:48	1
Ethylbenzene	ND		0.00167	0.000559	mg/Kg		02/18/19 13:24	02/18/19 16:48	1
<b>Toluene</b>	<b>0.000640</b>	<b>J</b>	0.00167	0.000618	mg/Kg		02/18/19 13:24	02/18/19 16:48	1
Xylenes, Total	ND		0.00501	0.00103	mg/Kg		02/18/19 13:24	02/18/19 16:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	133	X	70 - 130				02/18/19 13:24	02/18/19 16:48	1
4-Bromofluorobenzene (Surr)	100		70 - 130				02/18/19 13:24	02/18/19 16:48	1
Dibromofluoromethane (Surr)	126		70 - 130				02/18/19 13:24	02/18/19 16:48	1
Toluene-d8 (Surr)	98		70 - 130				02/18/19 13:24	02/18/19 16:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.60	2.30	mg/Kg		02/18/19 13:23	02/21/19 15:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		50 - 150				02/18/19 13:23	02/21/19 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:38	1
MRO (C28-C35)	ND		4.92	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	76		50 - 150				02/19/19 14:18	02/22/19 09:38	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>15.4</b>		9.93	6.95	mg/Kg		02/21/19 00:45		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-70**

**Matrix: Solid**

Date Collected: 02/14/19 11:53  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.94	6.96	mg/Kg			02/20/19 05:13	1

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 2' bgs**

**Lab Sample ID: 490-168662-71**

**Matrix: Solid**

Date Collected: 02/14/19 11:55  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.03	mg/Kg			02/20/19 05:29	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 4' bgs**

**Lab Sample ID: 490-168662-72**

Matrix: Solid

Date Collected: 02/14/19 11:57  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.9		9.97	6.98	mg/Kg			02/20/19 05:46	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 8' bgs**

**Lab Sample ID: 490-168662-73**

Matrix: Solid

Date Collected: 02/14/19 12:11  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.1		10.1	7.06	mg/Kg			02/20/19 06:03	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 9' bgs**

**Lab Sample ID: 490-168662-74**

**Matrix: Solid**

Date Collected: 02/14/19 12:13

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00192	0.000643	mg/Kg		02/18/19 13:24	02/18/19 17:17	1
Ethylbenzene	ND		0.00192	0.000643	mg/Kg		02/18/19 13:24	02/18/19 17:17	1
Toluene	ND		0.00192	0.000710	mg/Kg		02/18/19 13:24	02/18/19 17:17	1
Xylenes, Total	ND		0.00576	0.00118	mg/Kg		02/18/19 13:24	02/18/19 17:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				02/18/19 13:24	02/18/19 17:17	1
4-Bromofluorobenzene (Surr)	134	X	70 - 130				02/18/19 13:24	02/18/19 17:17	1
Dibromofluoromethane (Surr)	82		70 - 130				02/18/19 13:24	02/18/19 17:17	1
Toluene-d8 (Surr)	81		70 - 130				02/18/19 13:24	02/18/19 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.86	2.43	mg/Kg		02/18/19 13:23	02/21/19 16:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		50 - 150				02/18/19 13:23	02/21/19 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:55	1
MRO (C28-C35)	ND		4.91	2.46	mg/Kg		02/19/19 14:18	02/22/19 09:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	77		50 - 150				02/19/19 14:18	02/22/19 09:55	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		9.87	6.91	mg/Kg		02/21/19 01:00		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-08-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-75**

**Matrix: Solid**

Date Collected: 02/14/19 11:32  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.93	6.95	mg/Kg			02/20/19 06:52	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-08-001 @ 2' bgs**

**Lab Sample ID: 490-168662-76**

**Matrix: Solid**

Date Collected: 02/14/19 11:33  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.01	mg/Kg			02/20/19 07:09	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-08-001 @ 4' bgs**

**Lab Sample ID: 490-168662-77**

**Matrix: Solid**

Date Collected: 02/14/19 11:36  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		9.99	6.99	mg/Kg			02/20/19 07:25	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-08-001 @ 8' bgs**

**Lab Sample ID: 490-168662-78**

**Matrix: Solid**

Date Collected: 02/14/19 11:50  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00190	0.000637	mg/Kg		02/18/19 13:24	02/18/19 17:47	1
Ethylbenzene	ND		0.00190	0.000637	mg/Kg		02/18/19 13:24	02/18/19 17:47	1
Toluene	ND		0.00190	0.000703	mg/Kg		02/18/19 13:24	02/18/19 17:47	1
Xylenes, Total	ND		0.00570	0.00117	mg/Kg		02/18/19 13:24	02/18/19 17:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	99		70 - 130				02/18/19 13:24	02/18/19 17:47	1
4-Bromofluorobenzene (Surr)	159	X	70 - 130				02/18/19 13:24	02/18/19 17:47	1
Dibromofluoromethane (Surr)	75		70 - 130				02/18/19 13:24	02/18/19 17:47	1
Toluene-d8 (Surr)	97		70 - 130				02/18/19 13:24	02/18/19 17:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.40	2.20	mg/Kg		02/18/19 13:23	02/21/19 16:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/18/19 13:23	02/21/19 16:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.90	2.45	mg/Kg		02/19/19 14:18	02/22/19 10:11	1
MRO (C28-C35)	ND		4.90	2.45	mg/Kg		02/19/19 14:18	02/22/19 10:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	79		50 - 150				02/19/19 14:18	02/22/19 10:11	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		10.1	7.05	mg/Kg		02/21/19 01:15		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-09-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-79**

Matrix: Solid

Date Collected: 02/14/19 11:09  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg			02/20/19 07:42	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-09-001 @ 2' bgs**

**Lab Sample ID: 490-168662-80**

Matrix: Solid

Date Collected: 02/14/19 11:11  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.10	mg/Kg			02/20/19 07:59	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-09-001 @ 4' bgs**

**Lab Sample ID: 490-168662-81**

Matrix: Solid

Date Collected: 02/14/19 11:15  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.5		9.95	6.96	mg/Kg			02/20/19 08:15	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-09-001 @ 8' bgs**

**Lab Sample ID: 490-168662-82**

**Matrix: Solid**

Date Collected: 02/14/19 11:28  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00196	0.000657	mg/Kg		02/18/19 13:24	02/18/19 18:16	1
Ethylbenzene	ND		0.00196	0.000657	mg/Kg		02/18/19 13:24	02/18/19 18:16	1
Toluene	ND		0.00196	0.000725	mg/Kg		02/18/19 13:24	02/18/19 18:16	1
Xylenes, Total	ND		0.00588	0.00121	mg/Kg		02/18/19 13:24	02/18/19 18:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	117		70 - 130				02/18/19 13:24	02/18/19 18:16	1
4-Bromofluorobenzene (Surr)	108		70 - 130				02/18/19 13:24	02/18/19 18:16	1
Dibromofluoromethane (Surr)	91		70 - 130				02/18/19 13:24	02/18/19 18:16	1
Toluene-d8 (Surr)	106		70 - 130				02/18/19 13:24	02/18/19 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.55	2.28	mg/Kg		02/18/19 13:23	02/21/19 17:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		50 - 150				02/18/19 13:23	02/21/19 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.93	2.47	mg/Kg		02/19/19 16:17	02/21/19 14:49	1
MRO (C28-C35)	ND		4.93	2.47	mg/Kg		02/19/19 16:17	02/21/19 14:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	82		50 - 150				02/19/19 16:17	02/21/19 14:49	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.5		10.0	7.03	mg/Kg			02/20/19 19:49	1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-83**

Matrix: Solid

Date Collected: 02/14/19 14:09  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.01	mg/Kg			02/20/19 20:33	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 2' bgs**

**Lab Sample ID: 490-168662-84**

Matrix: Solid

Date Collected: 02/14/19 14:11  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.93	6.95	mg/Kg			02/20/19 20:48	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 4' bgs**

**Lab Sample ID: 490-168662-85**

Matrix: Solid

Date Collected: 02/14/19 14:12  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.08	mg/Kg			02/20/19 21:03	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 8' bgs**

**Lab Sample ID: 490-168662-86**

Matrix: Solid

Date Collected: 02/14/19 14:20  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg			02/20/19 21:18	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 11' bgs**

**Lab Sample ID: 490-168662-87**

**Matrix: Solid**

Date Collected: 02/14/19 14:23  
Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00192	0.000642	mg/Kg		02/18/19 13:24	02/18/19 18:46	1
Ethylbenzene	ND		0.00192	0.000642	mg/Kg		02/18/19 13:24	02/18/19 18:46	1
Toluene	ND		0.00192	0.000709	mg/Kg		02/18/19 13:24	02/18/19 18:46	1
Xylenes, Total	ND		0.00575	0.00118	mg/Kg		02/18/19 13:24	02/18/19 18:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	123		70 - 130				02/18/19 13:24	02/18/19 18:46	1
4-Bromofluorobenzene (Surr)	107		70 - 130				02/18/19 13:24	02/18/19 18:46	1
Dibromofluoromethane (Surr)	94		70 - 130				02/18/19 13:24	02/18/19 18:46	1
Toluene-d8 (Surr)	103		70 - 130				02/18/19 13:24	02/18/19 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.22	2.11	mg/Kg		02/18/19 13:23	02/21/19 17:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		50 - 150				02/18/19 13:23	02/21/19 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.98	2.49	mg/Kg		02/19/19 16:17	02/21/19 15:06	1
MRO (C28-C35)	ND		4.98	2.49	mg/Kg		02/19/19 16:17	02/21/19 15:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	71		50 - 150				02/19/19 16:17	02/21/19 15:06	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.88	6.91	mg/Kg		02/20/19 21:33		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-88**

Matrix: Solid

Date Collected: 02/14/19 09:56  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.85	6.89	mg/Kg			02/20/19 21:47	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 2' bgs**

**Lab Sample ID: 490-168662-89**

Matrix: Solid

Date Collected: 02/14/19 10:00  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.99	6.99	mg/Kg			02/20/19 22:02	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 4' bgs**

**Lab Sample ID: 490-168662-90**

Matrix: Solid

Date Collected: 02/14/19 10:01  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.85	6.90	mg/Kg			02/20/19 22:17	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 8' bgs**

**Lab Sample ID: 490-168662-91**

Matrix: Solid

Date Collected: 02/14/19 10:08  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.95	6.97	mg/Kg			02/20/19 22:32	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 10' bgs**

**Lab Sample ID: 490-168662-92**

**Matrix: Solid**

Date Collected: 02/14/19 10:12

Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00178	0.000597	mg/Kg		02/18/19 13:24	02/18/19 19:16	1
Ethylbenzene	ND		0.00178	0.000597	mg/Kg		02/18/19 13:24	02/18/19 19:16	1
Toluene	ND		0.00178	0.000660	mg/Kg		02/18/19 13:24	02/18/19 19:16	1
Xylenes, Total	ND		0.00535	0.00110	mg/Kg		02/18/19 13:24	02/18/19 19:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	119		70 - 130				02/18/19 13:24	02/18/19 19:16	1
4-Bromofluorobenzene (Surr)	108		70 - 130				02/18/19 13:24	02/18/19 19:16	1
Dibromofluoromethane (Surr)	93		70 - 130				02/18/19 13:24	02/18/19 19:16	1
Toluene-d8 (Surr)	104		70 - 130				02/18/19 13:24	02/18/19 19:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.39	2.20	mg/Kg		02/18/19 13:23	02/21/19 18:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	93		50 - 150				02/18/19 13:23	02/21/19 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.96	2.48	mg/Kg		02/19/19 16:17	02/21/19 15:23	1
MRO (C28-C35)	ND		4.96	2.48	mg/Kg		02/19/19 16:17	02/21/19 15:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	84		50 - 150				02/19/19 16:17	02/21/19 15:23	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.93	6.95	mg/Kg		02/20/19 23:16		1

TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-08-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-93**

**Matrix: Solid**

Date Collected: 02/14/19 15:23  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.09	mg/Kg			02/20/19 23:31	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-08-001 @ 2' bgs**

**Lab Sample ID: 490-168662-94**

Matrix: Solid

Date Collected: 02/14/19 15:25  
Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.89	6.92	mg/Kg			02/20/19 23:46	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-08-001 @ 4' bgs**

**Lab Sample ID: 490-168662-95**

Matrix: Solid

Date Collected: 02/14/19 15:27

Date Received: 02/16/19 10:25

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.97	6.98	mg/Kg			02/21/19 00:01	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-08-001 @ 7' bgs**

**Lab Sample ID: 490-168662-96**

**Matrix: Solid**

Date Collected: 02/14/19 15:33  
 Date Received: 02/16/19 10:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00185	0.000619	mg/Kg		02/18/19 13:24	02/18/19 19:45	1
Ethylbenzene	ND		0.00185	0.000619	mg/Kg		02/18/19 13:24	02/18/19 19:45	1
Toluene	ND		0.00185	0.000684	mg/Kg		02/18/19 13:24	02/18/19 19:45	1
Xylenes, Total	ND		0.00555	0.00114	mg/Kg		02/18/19 13:24	02/18/19 19:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	122		70 - 130				02/18/19 13:24	02/18/19 19:45	1
4-Bromofluorobenzene (Surr)	107		70 - 130				02/18/19 13:24	02/18/19 19:45	1
Dibromofluoromethane (Surr)	95		70 - 130				02/18/19 13:24	02/18/19 19:45	1
Toluene-d8 (Surr)	104		70 - 130				02/18/19 13:24	02/18/19 19:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.87	2.44	mg/Kg		02/18/19 13:23	02/21/19 18:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		50 - 150				02/18/19 13:23	02/21/19 18:59	1

## Method: 8015B - Diesel Range Organics (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		02/19/19 16:17	02/21/19 15:40	1
MRO (C28-C35)	ND		4.97	2.48	mg/Kg		02/19/19 16:17	02/21/19 15:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	71		50 - 150				02/19/19 16:17	02/21/19 15:40	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.86	6.90	mg/Kg		02/21/19 00:16		1

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: MB 490-575981/7**

**Matrix: Solid**

**Analysis Batch: 575981**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.000670	mg/Kg			02/18/19 13:37	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			02/18/19 13:37	1
Toluene	ND		0.00200	0.000740	mg/Kg			02/18/19 13:37	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			02/18/19 13:37	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	121		70 - 130		02/18/19 13:37	1
4-Bromofluorobenzene (Surr)	107		70 - 130		02/18/19 13:37	1
Dibromofluoromethane (Surr)	93		70 - 130		02/18/19 13:37	1
Toluene-d8 (Surr)	105		70 - 130		02/18/19 13:37	1

**Lab Sample ID: LCS 490-575981/3**

**Matrix: Solid**

**Analysis Batch: 575981**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result							
Benzene	0.0500	0.05183			mg/Kg		104	70 - 130	
Ethylbenzene	0.0500	0.05130			mg/Kg		103	70 - 130	
Toluene	0.0500	0.05098			mg/Kg		102	70 - 130	
Xylenes, Total	0.100	0.1031			mg/Kg		103	70 - 130	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	119		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	93		70 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 490-575981/4**

**Matrix: Solid**

**Analysis Batch: 575981**

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

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result								
Benzene	0.0500	0.05099			mg/Kg		102	70 - 130	2	37
Ethylbenzene	0.0500	0.04982			mg/Kg		100	70 - 130	3	38
Toluene	0.0500	0.04973			mg/Kg		99	70 - 130	2	40
Xylenes, Total	0.100	0.1004			mg/Kg		100	70 - 130	3	38

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	120		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130
Dibromofluoromethane (Surr)	92		70 - 130
Toluene-d8 (Surr)	104		70 - 130

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: 490-168644-A-2-D MS**

**Matrix: Solid**

**Analysis Batch: 575981**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 576019**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	0.0134		0.0457	0.05726		mg/Kg		96	21 - 150
Ethylbenzene	ND		0.0457	0.03219		mg/Kg		70	10 - 150
Toluene	ND		0.0457	0.03707		mg/Kg		81	17 - 150
Xylenes, Total	ND		0.0914	0.06046		mg/Kg		66	10 - 150

**MS**    **MS**

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	121		70 - 130
4-Bromofluorobenzene (Surr)	112		70 - 130
Dibromofluoromethane (Surr)	94		70 - 130
Toluene-d8 (Surr)	105		70 - 130

**Lab Sample ID: 490-168644-A-2-E MSD**

**Matrix: Solid**

**Analysis Batch: 575981**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 576019**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	0.0134		0.0442	0.05732		mg/Kg		99	21 - 150	0	50
Ethylbenzene	ND		0.0442	0.03300		mg/Kg		75	10 - 150	2	50
Toluene	ND		0.0442	0.03826		mg/Kg		87	17 - 150	3	50
Xylenes, Total	ND		0.0883	0.06139		mg/Kg		69	10 - 150	2	50

**MSD**    **MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	118		70 - 130
4-Bromofluorobenzene (Surr)	110		70 - 130
Dibromofluoromethane (Surr)	92		70 - 130
Toluene-d8 (Surr)	106		70 - 130

**Lab Sample ID: 490-168662-3 MS**

**Matrix: Solid**

**Analysis Batch: 576553**

**Client Sample ID: NRP-BG-001 @ 4' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576258**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		0.0485	0.05009		mg/Kg		103	21 - 150
Ethylbenzene	ND		0.0485	0.04740		mg/Kg		98	10 - 150
Toluene	ND		0.0485	0.04769		mg/Kg		98	17 - 150
Xylenes, Total	ND		0.0971	0.09493		mg/Kg		98	10 - 150

**MS**    **MS**

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	97		70 - 130

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: 490-168662-3 MSD**

**Matrix: Solid**

**Analysis Batch: 576553**

**Client Sample ID: NRP-BG-001 @ 4' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576258**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Benzene	ND		0.0489	0.05015		mg/Kg		102	21 - 150	0	50	
Ethylbenzene	ND		0.0489	0.04826		mg/Kg		99	10 - 150	2	50	
Toluene	ND		0.0489	0.04829		mg/Kg		99	17 - 150	1	50	
Xylenes, Total	ND		0.0978	0.09520		mg/Kg		97	10 - 150	0	50	

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	90		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: 490-168662-64 MS**

**Matrix: Solid**

**Analysis Batch: 576640**

**Client Sample ID: SRP-SB-05-001 @ 10' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576258**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Benzene	ND		0.0497	0.05131		mg/Kg		103	21 - 150			
Ethylbenzene	ND		0.0497	0.04805		mg/Kg		97	10 - 150			
Toluene	ND		0.0497	0.04882		mg/Kg		98	17 - 150			
Xylenes, Total	ND		0.0994	0.09771		mg/Kg		98	10 - 150			

**MS MS**

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	96		70 - 130

**Lab Sample ID: 490-168662-64 MSD**

**Matrix: Solid**

**Analysis Batch: 576640**

**Client Sample ID: SRP-SB-05-001 @ 10' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576258**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Benzene	ND		0.0468	0.05051		mg/Kg		108	21 - 150	2	50	
Ethylbenzene	ND		0.0468	0.04825		mg/Kg		103	10 - 150	0	50	
Toluene	ND		0.0468	0.04866		mg/Kg		104	17 - 150	0	50	
Xylenes, Total	ND		0.0936	0.09551		mg/Kg		102	10 - 150	2	50	

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	96		70 - 130

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: MB 490-576553/7**

**Matrix: Solid**

**Analysis Batch: 576553**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.000670	mg/Kg			02/20/19 18:50	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			02/20/19 18:50	1
Toluene	ND		0.00200	0.000740	mg/Kg			02/20/19 18:50	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			02/20/19 18:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		02/20/19 18:50	1
4-Bromofluorobenzene (Surr)	98		70 - 130		02/20/19 18:50	1
Dibromofluoromethane (Surr)	121		70 - 130		02/20/19 18:50	1
Toluene-d8 (Surr)	93		70 - 130		02/20/19 18:50	1

**Lab Sample ID: LCS 490-576553/3**

**Matrix: Solid**

**Analysis Batch: 576553**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spikes	LCS	LCS	D	%Rec.	Limits
	Added	Result	Qualifier			
Benzene	0.0500	0.04993		mg/Kg	100	70 - 130
Ethylbenzene	0.0500	0.04704		mg/Kg	94	70 - 130
Toluene	0.0500	0.04731		mg/Kg	95	70 - 130
Xylenes, Total	0.100	0.09581		mg/Kg	96	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 490-576553/4**

**Matrix: Solid**

**Analysis Batch: 576553**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier					
Benzene	0.0500	0.04871		mg/Kg	97	70 - 130	2	37
Ethylbenzene	0.0500	0.04723		mg/Kg	94	70 - 130	0	38
Toluene	0.0500	0.04725		mg/Kg	94	70 - 130	0	40
Xylenes, Total	0.100	0.09451		mg/Kg	95	70 - 130	1	38

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	105		70 - 130
Toluene-d8 (Surr)	98		70 - 130

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: MB 490-576640/7**

**Matrix: Solid**

**Analysis Batch: 576640**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.00200	0.000670	mg/Kg			02/21/19 13:40	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			02/21/19 13:40	1
Toluene	ND		0.00200	0.000740	mg/Kg			02/21/19 13:40	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			02/21/19 13:40	1

**MB MB**

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		02/21/19 13:40	1
4-Bromofluorobenzene (Surr)	95		70 - 130		02/21/19 13:40	1
Dibromofluoromethane (Surr)	122		70 - 130		02/21/19 13:40	1
Toluene-d8 (Surr)	92		70 - 130		02/21/19 13:40	1

**Lab Sample ID: LCS 490-576640/3**

**Matrix: Solid**

**Analysis Batch: 576640**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
	%Recovery	Qualifier								
Benzene			0.0500	0.05050		mg/Kg		101	70 - 130	
Ethylbenzene			0.0500	0.04986		mg/Kg		100	70 - 130	
Toluene			0.0500	0.04984		mg/Kg		100	70 - 130	
Xylenes, Total			0.100	0.09914		mg/Kg		99	70 - 130	

**LCS LCS**

Surrogate	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
	%Recovery	Qualifier								
1,2-Dichloroethane-d4 (Surr)	96			70 - 130						
4-Bromofluorobenzene (Surr)	93			70 - 130						
Dibromofluoromethane (Surr)	100			70 - 130						
Toluene-d8 (Surr)	97			70 - 130						

**Lab Sample ID: LCSD 490-576640/4**

**Matrix: Solid**

**Analysis Batch: 576640**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
	%Recovery	Qualifier									
Benzene			0.0500	0.05100		mg/Kg		102	70 - 130	1	37
Ethylbenzene			0.0500	0.04696		mg/Kg		94	70 - 130	6	38
Toluene			0.0500	0.04793		mg/Kg		96	70 - 130	4	40
Xylenes, Total			0.100	0.09730		mg/Kg		97	70 - 130	2	38

**LCSD LCSD**

Surrogate	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
	%Recovery	Qualifier									
1,2-Dichloroethane-d4 (Surr)	98			70 - 130							
4-Bromofluorobenzene (Surr)	97			70 - 130							
Dibromofluoromethane (Surr)	102			70 - 130							
Toluene-d8 (Surr)	97			70 - 130							

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: MB 490-576017/1-A**

**Matrix: Solid**

**Analysis Batch: 576634**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 576017**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics [C6 - C10]	ND		5.00	2.50	mg/Kg		02/18/19 11:45	02/21/19 15:04	1
<b>Surrogate</b>	<b>MB</b>	<b>MB</b>							
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	96		50 - 150				02/18/19 11:45	02/21/19 15:04	1

**Lab Sample ID: LCS 490-576017/2-A**

**Matrix: Solid**

**Analysis Batch: 576634**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 576017**

Analyte	Spike		LCS	LCS	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier	Unit	mg/Kg	D	%Rec.	Limits	RPD
Gasoline Range Organics [C6 - C10]		500	548.6				110	70 - 130	
<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>							
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits						
	115		50 - 150						

**Lab Sample ID: LCSD 490-576017/3-A**

**Matrix: Solid**

**Analysis Batch: 576634**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 576017**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier	Unit	mg/Kg	D	%Rec.	Limits	RPD
Gasoline Range Organics [C6 - C10]		500	591.6				118	70 - 130	8
<b>Surrogate</b>	<b>LCSD</b>	<b>LCSD</b>							
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits						
	118		50 - 150						

**Lab Sample ID: 490-168662-96 MS**

**Matrix: Solid**

**Analysis Batch: 576634**

**Client Sample ID: HDP-SB-08-001 @ 7' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576017**

Analyte	Sample		Spike	MS	MS	Unit	D	%Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.	Limits	RPD
Gasoline Range Organics [C6 - C10]	ND		487	341.1		mg/Kg		70	56 - 130	
<b>Surrogate</b>	<b>MS</b>	<b>MS</b>								
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits							
	102		50 - 150							

**Lab Sample ID: 490-168662-96 MSD**

**Matrix: Solid**

**Analysis Batch: 576634**

**Client Sample ID: HDP-SB-08-001 @ 7' bgs**

**Prep Type: Total/NA**

**Prep Batch: 576017**

Analyte	Sample		Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.	Limits	RPD
Gasoline Range Organics [C6 - C10]	ND		487	366.2		mg/Kg		75	56 - 130	7

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID:** 490-168662-96 MSD

**Matrix:** Solid

**Analysis Batch:** 576634

**Client Sample ID:** HDP-SB-08-001 @ 7' bgs

**Prep Type:** Total/NA

**Prep Batch:** 576017

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
a,a,a-Trifluorotoluene			106		50 - 150

**Lab Sample ID:** MB 490-576251/1-A

**Matrix:** Solid

**Analysis Batch:** 576634

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 576251

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]			ND		5.00	2.50	mg/Kg		02/19/19 12:38	02/22/19 23:54	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene			96		50 - 150				02/19/19 12:38	02/22/19 23:54	1

**Lab Sample ID:** LCS 490-576251/2-A

**Matrix:** Solid

**Analysis Batch:** 576634

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 576251

Analyte	LCS	LCS	Spike	Result	LCS	Qualifier	Unit	D	%Rec.	Limts
Gasoline Range Organics [C6 - C10]			Added	500	560.0		mg/Kg		112	70 - 130
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits					
a,a,a-Trifluorotoluene			104		50 - 150					

**Lab Sample ID:** LCSD 490-576251/3-A

**Matrix:** Solid

**Analysis Batch:** 576634

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 576251

Analyte	LCSD	LCSD	Spike	Result	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
Gasoline Range Organics [C6 - C10]			Added	500	558.5		mg/Kg		112	70 - 130	0
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits						
a,a,a-Trifluorotoluene			113		50 - 150						

**Lab Sample ID:** 490-168662-3 MS

**Matrix:** Solid

**Analysis Batch:** 576634

**Client Sample ID:** NRP-BG-001 @ 4' bgs

**Prep Type:** Total/NA

**Prep Batch:** 576251

Analyte	Sample	Sample	Spike	MS	MS	%Rec.
Gasoline Range Organics [C6 - C10]	Result	Qualifier	Added	Result	Qualifier	Limits
	ND		489	494.4		mg/Kg
Surrogate	MS	MS	%Recovery	Qualifier	Limits	
a,a,a-Trifluorotoluene			110		50 - 150	

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

Lab Sample ID: 490-168662-3 MSD				Client Sample ID: NRP-BG-001 @ 4' bgs						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 576634				Prep Batch: 576251						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		489	532.4		mg/Kg		109	56 - 130	7 21
Surrogate	MSD %Recovery	MSD Qualifier	Limits							
a,a,a-Trifluorotoluene	113		50 - 150							

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

Lab Sample ID: MB 490-576297/1-A				Client Sample ID: Method Blank						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 576719				Prep Batch: 576297						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		5.00	2.50	mg/Kg		02/19/19 14:18	02/22/19 03:45		1
MRO (C28-C35)	ND		5.00	2.50	mg/Kg		02/19/19 14:18	02/22/19 03:45		1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac	
<i>o-Terphenyl (Surr)</i>	75		50 - 150				02/19/19 14:18	02/22/19 03:45		1

Lab Sample ID: LCS 490-576297/2-A				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 576719				Prep Batch: 576297						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits			
Diesel Range Organics [C10-C28]	40.0	33.91		mg/Kg		85	54 - 130			
Surrogate	LCS %Recovery	LCS Qualifier	Limits							
<i>o-Terphenyl (Surr)</i>	78		50 - 150							

Lab Sample ID: LCSD 490-576297/25-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 576719				Prep Batch: 576297						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit		
Diesel Range Organics [C10-C28]	40.0	37.21		mg/Kg		93	54 - 130	9	47	
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							
<i>o-Terphenyl (Surr)</i>	83		50 - 150							

Lab Sample ID: 490-168662-3 MS				Client Sample ID: NRP-BG-001 @ 4' bgs						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 576719				Prep Batch: 576297						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		39.8	33.04		mg/Kg		83	10 - 142	

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

<b>Surrogate</b>	<b>MS</b>	<b>MS</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
<i>o-Terphenyl (Surr)</i>			70		50 - 150

**Lab Sample ID: 490-168662-3 MSD**

**Matrix: Solid**

**Analysis Batch: 576719**

**Client Sample ID: NRP-BG-001 @ 4' bgs**  
**Prep Type: Total/NA**  
**Prep Batch: 576297**

<b>Analyte</b>	<b>Sample Result</b>	<b>Sample Qualifier</b>	<b>Spike Added</b>	<b>MSD Result</b>	<b>MSD Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>RPD</b>
						mg/Kg		Limits	RPD Limit
Diesel Range Organics [C10-C28]	ND		39.1	30.26				77	10 - 142
<i>o-Terphenyl (Surr)</i>	66			50 - 150					9 47

**Lab Sample ID: MB 490-576332/1-A**

**Matrix: Solid**

**Analysis Batch: 576486**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 576332**

<b>Analyte</b>	<b>MB Result</b>	<b>MB Qualifier</b>	<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
					mg/Kg				
Diesel Range Organics [C10-C28]	ND		5.00	2.50			02/19/19 16:17	02/21/19 06:16	1
MRO (C28-C35)	ND		5.00	2.50	mg/Kg		02/19/19 16:17	02/21/19 06:16	1
<i>Surrogate</i>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	70		50 - 150				02/19/19 16:17	02/21/19 06:16	1

**Lab Sample ID: LCS 490-576332/2-A**

**Matrix: Solid**

**Analysis Batch: 576486**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 576332**

<b>Analyte</b>	<b>LCS Spike Added</b>	<b>LCS Result</b>	<b>LCS Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>Limits</b>	<b>Dil Fac</b>
				mg/Kg				
Diesel Range Organics [C10-C28]	40.0	33.53				84	54 - 130	
<i>Surrogate</i>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>					
<i>o-Terphenyl (Surr)</i>	71		50 - 150					

**Lab Sample ID: LCSD 490-576332/3-A**

**Matrix: Solid**

**Analysis Batch: 576486**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 576332**

<b>Analyte</b>	<b>LCSD Spike Added</b>	<b>LCSD Result</b>	<b>LCSD Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>RPD</b>	<b>Limit</b>
				mg/Kg				
Diesel Range Organics [C10-C28]	40.0	31.77				79	54 - 130	
<i>Surrogate</i>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>					
<i>o-Terphenyl (Surr)</i>	80		50 - 150					

**Lab Sample ID: 490-168662-39 MS**

**Matrix: Solid**

**Analysis Batch: 576719**

**Client Sample ID: NRP-SB-12-001 @ 2' bgs**  
**Prep Type: Total/NA**  
**Prep Batch: 576332**

<b>Analyte</b>	<b>Sample Result</b>	<b>Sample Qualifier</b>	<b>Spike Added</b>	<b>MS Result</b>	<b>MS Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>Limits</b>
						mg/Kg			
Diesel Range Organics [C10-C28]	ND		39.6	29.19				74	10 - 142

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID:** 490-168662-39 MS

**Matrix:** Solid

**Analysis Batch:** 576719

**Client Sample ID:** NRP-SB-12-001 @ 2' bgs

**Prep Type:** Total/NA

**Prep Batch:** 576332

Surrogate	MS	MS	%Recovery	Qualifier	Limits
o-Terphenyl (Sur)			61		50 - 150

**Lab Sample ID:** 490-168662-39 MSD

**Matrix:** Solid

**Analysis Batch:** 576719

**Client Sample ID:** NRP-SB-12-001 @ 2' bgs

**Prep Type:** Total/NA

**Prep Batch:** 576332

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		39.1	32.69		mg/Kg		84	10 - 142	11 47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Sur)	70		50 - 150

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 490-576767/3

**Matrix:** Solid

**Analysis Batch:** 576767

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.00	0.700	mg/Kg			02/21/19 13:14	1

**Lab Sample ID:** LCS 490-576767/4

**Matrix:** Solid

**Analysis Batch:** 576767

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	10.0	9.895		mg/Kg		99	90 - 110

**Lab Sample ID:** LCSD 490-576767/5

**Matrix:** Solid

**Analysis Batch:** 576767

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Chloride	10.0	10.10		mg/Kg		101	90 - 110	2 20

**Lab Sample ID:** MB 490-576127/1-A

**Matrix:** Solid

**Analysis Batch:** 576270

**Client Sample ID:** Method Blank

**Prep Type:** Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.99	6.99	mg/Kg			02/19/19 09:02	1

**Lab Sample ID:** LCS 490-576127/2-A

**Matrix:** Solid

**Analysis Batch:** 576270

**Client Sample ID:** Lab Control Sample

**Prep Type:** Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	100	96.61		mg/Kg		96	90 - 110

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Lab Sample ID: LCSD 490-576127/3-A**  
**Matrix: Solid**  
**Analysis Batch: 576270**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD	RPD Limit
Chloride		99.5	96.55				97	90 - 110	0	0	20

**Lab Sample ID: 490-168662-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 576270**

**Client Sample ID: NRP-BG-001 @ 0-1' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		99.4	91.38				92	80 - 120		

**Lab Sample ID: 490-168662-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 576270**

**Client Sample ID: NRP-BG-001 @ 0-1' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		99.7	96.72				97	80 - 120	6	20

**Lab Sample ID: MB 490-576220/1-A**  
**Matrix: Solid**  
**Analysis Batch: 576278**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.99	6.99				02/19/19 16:41	1

**Lab Sample ID: LCS 490-576220/2-A**  
**Matrix: Solid**  
**Analysis Batch: 576278**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride		99.6	94.83				95	90 - 110		

**Lab Sample ID: LCSD 490-576220/3-A**  
**Matrix: Solid**  
**Analysis Batch: 576278**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride		100	98.93				98	90 - 110	4	20

**Lab Sample ID: 490-168662-21 MS**  
**Matrix: Solid**  
**Analysis Batch: 576278**

**Client Sample ID: NRP-SB-06-001 @ 5.75' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	559	E	99.4	590.5	E 4			31	80 - 120		

**Lab Sample ID: 490-168662-21 MSD**  
**Matrix: Solid**  
**Analysis Batch: 576278**

**Client Sample ID: NRP-SB-06-001 @ 5.75' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit mg/Kg	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	559	E	99.6	631.4	E 4			72	80 - 120	7	20

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 490-576340/1-A**

**Matrix: Solid**

**Analysis Batch: 576373**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		9.99	6.99	mg/Kg			02/20/19 02:10	1

**Lab Sample ID: LCS 490-576340/2-A**

**Matrix: Solid**

**Analysis Batch: 576373**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Chloride	96.9	91.26		mg/Kg		94	90 - 110	

**Lab Sample ID: LCSD 490-576340/3-A**

**Matrix: Solid**

**Analysis Batch: 576373**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Chloride	99.9	93.72		mg/Kg		94	90 - 110	3

**Lab Sample ID: 490-168662-62 MS**

**Matrix: Solid**

**Analysis Batch: 576373**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			
Chloride	15.6		100	126.2		mg/Kg	110	80 - 120

**Lab Sample ID: 490-168662-62 MSD**

**Matrix: Solid**

**Analysis Batch: 576373**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			
Chloride	15.6		99.6	116.2		mg/Kg	101	80 - 120

**Lab Sample ID: MB 490-576127/1-A**

**Matrix: Solid**

**Analysis Batch: 576401**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		9.99	6.99	mg/Kg			02/20/19 08:28	1

**Lab Sample ID: LCS 490-576127/2-A**

**Matrix: Solid**

**Analysis Batch: 576401**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Chloride	100	97.23		mg/Kg		97	90 - 110	

**Lab Sample ID: LCSD 490-576127/3-A**

**Matrix: Solid**

**Analysis Batch: 576401**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier					
Chloride	99.5	97.77		mg/Kg		98	90 - 110	1

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Lab Sample ID: MB 490-576388/1-A**  
**Matrix: Solid**  
**Analysis Batch: 576430**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.98	6.99	mg/Kg			02/20/19 11:26	1

**Lab Sample ID: LCS 490-576388/2-A**  
**Matrix: Solid**  
**Analysis Batch: 576430**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	100	97.45		mg/Kg		97	90 - 110

**Lab Sample ID: LCSD 490-576388/3-A**  
**Matrix: Solid**  
**Analysis Batch: 576430**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	100	99.09		mg/Kg		99	90 - 110	2	20

**Lab Sample ID: 490-168662-42 MS**  
**Matrix: Solid**  
**Analysis Batch: 576430**

**Client Sample ID: SRP-SB-01-001 @ 0-1' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	ND		99.4	95.95		mg/Kg		96	80 - 120

**Lab Sample ID: 490-168662-42 MSD**  
**Matrix: Solid**  
**Analysis Batch: 576430**

**Client Sample ID: SRP-SB-01-001 @ 0-1' bgs**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	ND		99.6	96.02		mg/Kg		96	80 - 120	0	20

**Lab Sample ID: MB 490-576390/1-A**  
**Matrix: Solid**  
**Analysis Batch: 576448**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.97	6.98	mg/Kg			02/20/19 19:05	1

**Lab Sample ID: LCS 490-576390/2-A**  
**Matrix: Solid**  
**Analysis Batch: 576448**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	99.7	95.88		mg/Kg		96	90 - 110

**Lab Sample ID: LCSD 490-576390/3-A**  
**Matrix: Solid**  
**Analysis Batch: 576448**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	99.8	97.52		mg/Kg		98	90 - 110	2	20

TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 490-168662-82 MS

Matrix: Solid

Analysis Batch: 576448

Client Sample ID: SRP-SB-09-001 @ 8' bgs

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloride	17.5		100	111.1		mg/Kg		93	80 - 120

Lab Sample ID: 490-168662-82 MSD

Matrix: Solid

Analysis Batch: 576448

Client Sample ID: SRP-SB-09-001 @ 8' bgs

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Chloride	17.5		99.6	112.7		mg/Kg		96	80 - 120	1	20

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## GC/MS VOA

### Analysis Batch: 575981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	8260B	576019
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	8260B	576019
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	8260B	576019
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	8260B	576019
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	8260B	576019
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	8260B	576019
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	8260B	576019
MB 490-575981/7	Method Blank	Total/NA	Solid	8260B	5
LCS 490-575981/3	Lab Control Sample	Total/NA	Solid	8260B	6
LCSD 490-575981/4	Lab Control Sample Dup	Total/NA	Solid	8260B	7
490-168644-A-2-D MS	Matrix Spike	Total/NA	Solid	8260B	8
490-168644-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	9

### Prep Batch: 576019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	5030B	10
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	5030B	11
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	5030B	12
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	5030B	
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	5030B	
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	5030B	
490-168644-A-2-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-168644-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

### Prep Batch: 576258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	5030B	
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	5030B	
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	5030B	
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	5030B	
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	5030B	
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	5030B	
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	5030B	
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	5030B	
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	5030B	
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	5030B	
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	5030B	
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	5030B	
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	5030B	
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	5030B	
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	5030B	
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	5030B	
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-64 MS	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-64 MSD	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	5030B	

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## Analysis Batch: 576553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8260B	576258
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	8260B	576258
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	8260B	576258
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	8260B	576258
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	8260B	576258
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	8260B	576258
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	8260B	576258
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	8260B	576258
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	8260B	576258
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	8260B	576258
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	8260B	576258
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	8260B	576258
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	8260B	576258
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	8260B	576258
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	8260B	576258
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	8260B	576258
MB 490-576553/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-576553/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-576553/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8260B	576258
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8260B	576258

## Analysis Batch: 576640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	8260B	576258
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	8260B	576258
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	8260B	576258
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	8260B	576258
MB 490-576640/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-576640/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-576640/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-168662-64 MS	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	8260B	576258
490-168662-64 MSD	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	8260B	576258

## GC VOA

### Prep Batch: 576017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	5030B	
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	5030B	
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	5030B	
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	5030B	
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	5030B	
MB 490-576017/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-576017/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-576017/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
490-168662-96 MS	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	5030B	
490-168662-96 MSD	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	5030B	

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## GC VOA (Continued)

### Prep Batch: 576251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	5
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	5030B	6
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	5030B	7
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	5030B	8
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	5030B	9
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	5030B	10
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	5030B	11
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	5030B	12
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	5030B	
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	5030B	
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	5030B	
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	5030B	
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	5030B	
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	5030B	
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	5030B	
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	5030B	
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	5030B	
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	5030B	
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	5030B	
MB 490-576251/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-576251/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-576251/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	5030B	

### Analysis Batch: 576634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576251
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	8015B	576251
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	8015B	576251
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	8015B	576251
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	8015B	576251
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	8015B	576251
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	8015B	576251
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	8015B	576251
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	8015B	576251
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	8015B	576251
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	8015B	576251
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	8015B	576251
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	8015B	576251
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	8015B	576251
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	8015B	576251
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	8015B	576251
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	8015B	576251
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	8015B	576251
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	8015B	576251
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	8015B	576017
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	8015B	576017
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	8015B	576017
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	8015B	576017

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## GC VOA (Continued)

### Analysis Batch: 576634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	8015B	576017
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	8015B	576017
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	8015B	576017
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	8015B	576017
MB 490-576017/1-A	Method Blank	Total/NA	Solid	8015B	576017
MB 490-576251/1-A	Method Blank	Total/NA	Solid	8015B	576251
LCS 490-576017/2-A	Lab Control Sample	Total/NA	Solid	8015B	576017
LCS 490-576251/2-A	Lab Control Sample	Total/NA	Solid	8015B	576251
LCSD 490-576017/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	576017
LCSD 490-576251/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	576251
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576251
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576251
490-168662-96 MS	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	8015B	576017
490-168662-96 MSD	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	8015B	576017

## GC Semi VOA

### Prep Batch: 576297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	3550C	
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	3550C	
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	3550C	
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	3550C	
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	3550C	
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	3550C	
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	3550C	
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	3550C	
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	3550C	
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	3550C	
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	3550C	
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	3550C	
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	3550C	
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	3550C	
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	3550C	
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	3550C	
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	3550C	
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	3550C	
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	3550C	
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	3550C	
MB 490-576297/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-576297/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-576297/25-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	3550C	
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	3550C	

### Prep Batch: 576332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	3550C	
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	3550C	
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	3550C	

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## GC Semi VOA (Continued)

### Prep Batch: 576332 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	3550C	5
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	3550C	6
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	3550C	7
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	3550C	8
MB 490-576332/1-A	Method Blank	Total/NA	Solid	3550C	9
LCS 490-576332/2-A	Lab Control Sample	Total/NA	Solid	3550C	10
LCSD 490-576332/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	11
490-168662-39 MS	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	3550C	12
490-168662-39 MSD	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	3550C	

### Analysis Batch: 576486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-576332/1-A	Method Blank	Total/NA	Solid	8015B	576332
LCS 490-576332/2-A	Lab Control Sample	Total/NA	Solid	8015B	576332
LCSD 490-576332/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	576332

### Analysis Batch: 576489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-45	SRP-SB-01-001 @ 7' bgs	Total/NA	Solid	8015B	576297
490-168662-54	SRP-SB-03-001 @ 10' bgs	Total/NA	Solid	8015B	576297
490-168662-64	SRP-SB-05-001 @ 10' bgs	Total/NA	Solid	8015B	576297

### Analysis Batch: 576719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576297
490-168662-8	SRP-BG-001@ 10' bgs	Total/NA	Solid	8015B	576297
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Total/NA	Solid	8015B	576297
490-168662-12	NRP-SB-02-001 @ 2' bgs	Total/NA	Solid	8015B	576297
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Total/NA	Solid	8015B	576297
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Total/NA	Solid	8015B	576297
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Total/NA	Solid	8015B	576297
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Total/NA	Solid	8015B	576297
490-168662-24	NRP-SB-07-001 @ 4' bgs	Total/NA	Solid	8015B	576297
490-168662-29	NRP-SB-08-001 @ 9' bgs	Total/NA	Solid	8015B	576297
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Total/NA	Solid	8015B	576297
490-168662-35	NRP-SB-10-001 @ 3' bgs	Total/NA	Solid	8015B	576297
490-168662-37	NRP-SB-11-001 @ 2' bgs	Total/NA	Solid	8015B	576332
490-168662-39	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	8015B	576332
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Total/NA	Solid	8015B	576332
490-168662-49	SRP-SB-02-001 @ 6' bgs	Total/NA	Solid	8015B	576297
490-168662-59	SRP-SB-04-001 @ 11' bgs	Total/NA	Solid	8015B	576297
490-168662-69	SRP-SB-06-001 @ 10' bgs	Total/NA	Solid	8015B	576297
490-168662-74	SRP-SB-07-001 @ 9' bgs	Total/NA	Solid	8015B	576297
490-168662-78	SRP-SB-08-001 @ 8' bgs	Total/NA	Solid	8015B	576297
490-168662-82	SRP-SB-09-001 @ 8' bgs	Total/NA	Solid	8015B	576332
490-168662-87	HDP-SB-06-001 @ 11' bgs	Total/NA	Solid	8015B	576332
490-168662-92	HDP-SB-07-001 @ 10' bgs	Total/NA	Solid	8015B	576332
490-168662-96	HDP-SB-08-001 @ 7' bgs	Total/NA	Solid	8015B	576332
MB 490-576297/1-A	Method Blank	Total/NA	Solid	8015B	576297
LCS 490-576297/2-A	Lab Control Sample	Total/NA	Solid	8015B	576297
LCSD 490-576297/25-A	Lab Control Sample Dup	Total/NA	Solid	8015B	576297

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## GC Semi VOA (Continued)

### Analysis Batch: 576719 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-3 MS	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576297
490-168662-3 MSD	NRP-BG-001 @ 4' bgs	Total/NA	Solid	8015B	576297
490-168662-39 MS	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	8015B	576332
490-168662-39 MSD	NRP-SB-12-001 @ 2' bgs	Total/NA	Solid	8015B	576332

## HPLC/IC

### Leach Batch: 576127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-1	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	DI Leach	9
490-168662-2	NRP-BG-001 @ 2' bgs	Soluble	Solid	DI Leach	10
490-168662-3	NRP-BG-001 @ 4' bgs	Soluble	Solid	DI Leach	11
490-168662-4	SRP-BG-001@ 0-1' bgs	Soluble	Solid	DI Leach	12
490-168662-5	SRP-BG-001@ 2' bgs	Soluble	Solid	DI Leach	
490-168662-6	SRP-BG-001@ 4' bgs	Soluble	Solid	DI Leach	
490-168662-7	SRP-BG-001@ 8' bgs	Soluble	Solid	DI Leach	
490-168662-8	SRP-BG-001@ 10' bgs	Soluble	Solid	DI Leach	
490-168662-9	NRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Soluble	Solid	DI Leach	
490-168662-11	NRP-SB-02-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-12	NRP-SB-02-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-14	NRP-SB-04-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Soluble	Solid	DI Leach	
490-168662-16	NRP-SB-05-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Soluble	Solid	DI Leach	
490-168662-18	NRP-SB-06-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-19	NRP-SB-06-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-20	NRP-SB-06-001 @ 4' bgs	Soluble	Solid	DI Leach	
MB 490-576127/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-576127/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-576127/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-168662-1 MS	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-1 MSD	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	DI Leach	

### Leach Batch: 576220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	DI Leach	
490-168662-22	NRP-SB-07-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-23	NRP-SB-07-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-24	NRP-SB-07-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-25	NRP-SB-08-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-26	NRP-SB-08-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-27	NRP-SB-08-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-28	NRP-SB-08-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-29	NRP-SB-08-001 @ 9' bgs	Soluble	Solid	DI Leach	
490-168662-30	NRP-SB-09-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-31	NRP-SB-09-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Soluble	Solid	DI Leach	
490-168662-33	NRP-SB-10-001 @ 0-1' bgs	Soluble	Solid	DI Leach	

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## HPLC/IC (Continued)

### Leach Batch: 576220 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-34	NRP-SB-10-001 @ 2' bgs	Soluble	Solid	DI Leach	5
490-168662-35	NRP-SB-10-001 @ 3' bgs	Soluble	Solid	DI Leach	5
490-168662-36	NRP-SB-11-001 @ 0-1' bgs	Soluble	Solid	DI Leach	5
490-168662-37	NRP-SB-11-001 @ 2' bgs	Soluble	Solid	DI Leach	6
490-168662-38	NRP-SB-12-001 @ 0-1' bgs	Soluble	Solid	DI Leach	6
490-168662-39	NRP-SB-12-001 @ 2' bgs	Soluble	Solid	DI Leach	7
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Soluble	Solid	DI Leach	7
MB 490-576220/1-A	Method Blank	Soluble	Solid	DI Leach	8
LCS 490-576220/2-A	Lab Control Sample	Soluble	Solid	DI Leach	9
LCSD 490-576220/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	9
490-168662-21 MS	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	DI Leach	10
490-168662-21 MSD	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	DI Leach	10

### Analysis Batch: 576270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-1	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-2	NRP-BG-001 @ 2' bgs	Soluble	Solid	300.0	576127
490-168662-3	NRP-BG-001 @ 4' bgs	Soluble	Solid	300.0	576127
490-168662-4	SRP-BG-001@ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-5	SRP-BG-001@ 2' bgs	Soluble	Solid	300.0	576127
490-168662-6	SRP-BG-001@ 4' bgs	Soluble	Solid	300.0	576127
490-168662-7	SRP-BG-001@ 8' bgs	Soluble	Solid	300.0	576127
490-168662-8	SRP-BG-001@ 10' bgs	Soluble	Solid	300.0	576127
490-168662-9	NRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-10	NRP-SB-01-001 @ 1.5' bgs	Soluble	Solid	300.0	576127
490-168662-11	NRP-SB-02-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-12	NRP-SB-02-001 @ 2' bgs	Soluble	Solid	300.0	576127
490-168662-13	NRP-SB-03-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-14	NRP-SB-04-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-15	NRP-SB-04-001 @ 1.5' bgs	Soluble	Solid	300.0	576127
490-168662-16	NRP-SB-05-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-17	NRP-SB-05-001 @ 1.75' bgs	Soluble	Solid	300.0	576127
490-168662-18	NRP-SB-06-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-19	NRP-SB-06-001 @ 2' bgs	Soluble	Solid	300.0	576127
MB 490-576127/1-A	Method Blank	Soluble	Solid	300.0	576127
LCS 490-576127/2-A	Lab Control Sample	Soluble	Solid	300.0	576127
LCSD 490-576127/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576127
490-168662-1 MS	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	300.0	576127
490-168662-1 MSD	NRP-BG-001 @ 0-1' bgs	Soluble	Solid	300.0	576127

### Analysis Batch: 576278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-22	NRP-SB-07-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-23	NRP-SB-07-001 @ 2' bgs	Soluble	Solid	300.0	576220
490-168662-25	NRP-SB-08-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-26	NRP-SB-08-001 @ 2' bgs	Soluble	Solid	300.0	576220
490-168662-27	NRP-SB-08-001 @ 4' bgs	Soluble	Solid	300.0	576220
490-168662-28	NRP-SB-08-001 @ 8' bgs	Soluble	Solid	300.0	576220
490-168662-29	NRP-SB-08-001 @ 9' bgs	Soluble	Solid	300.0	576220
490-168662-30	NRP-SB-09-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-31	NRP-SB-09-001 @ 2' bgs	Soluble	Solid	300.0	576220

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## HPLC/IC (Continued)

### Analysis Batch: 576278 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-32	NRP-SB-09-001 @ 3.5' bgs	Soluble	Solid	300.0	576220
490-168662-33	NRP-SB-10-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-34	NRP-SB-10-001 @ 2' bgs	Soluble	Solid	300.0	576220
490-168662-35	NRP-SB-10-001 @ 3' bgs	Soluble	Solid	300.0	576220
490-168662-36	NRP-SB-11-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-37	NRP-SB-11-001 @ 2' bgs	Soluble	Solid	300.0	576220
490-168662-38	NRP-SB-12-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
490-168662-40	NRP-SB-13-001 @ 0-1' bgs	Soluble	Solid	300.0	576220
MB 490-576220/1-A	Method Blank	Soluble	Solid	300.0	576220
LCS 490-576220/2-A	Lab Control Sample	Soluble	Solid	300.0	576220
LCSD 490-576220/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576220
490-168662-21 MS	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	300.0	576220
490-168662-21 MSD	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	300.0	576220

### Leach Batch: 576340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-62	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-63	SRP-SB-05-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-65	SRP-SB-06-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-66	SRP-SB-06-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-67	SRP-SB-06-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-68	SRP-SB-06-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-70	SRP-SB-07-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-71	SRP-SB-07-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-72	SRP-SB-07-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-73	SRP-SB-07-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-75	SRP-SB-08-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-76	SRP-SB-08-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-77	SRP-SB-08-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-79	SRP-SB-09-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-80	SRP-SB-09-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-81	SRP-SB-09-001 @ 4' bgs	Soluble	Solid	DI Leach	
MB 490-576340/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-576340/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-576340/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-168662-62 MS	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-62 MSD	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	DI Leach	

### Analysis Batch: 576373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-62	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	300.0	576340
490-168662-63	SRP-SB-05-001 @ 8' bgs	Soluble	Solid	300.0	576340
490-168662-65	SRP-SB-06-001 @ 0-1' bgs	Soluble	Solid	300.0	576340
490-168662-66	SRP-SB-06-001 @ 2' bgs	Soluble	Solid	300.0	576340
490-168662-67	SRP-SB-06-001 @ 4' bgs	Soluble	Solid	300.0	576340
490-168662-68	SRP-SB-06-001 @ 8' bgs	Soluble	Solid	300.0	576340
490-168662-70	SRP-SB-07-001 @ 0-1' bgs	Soluble	Solid	300.0	576340
490-168662-71	SRP-SB-07-001 @ 2' bgs	Soluble	Solid	300.0	576340
490-168662-72	SRP-SB-07-001 @ 4' bgs	Soluble	Solid	300.0	576340
490-168662-73	SRP-SB-07-001 @ 8' bgs	Soluble	Solid	300.0	576340
490-168662-75	SRP-SB-08-001 @ 0-1' bgs	Soluble	Solid	300.0	576340

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## HPLC/IC (Continued)

### Analysis Batch: 576373 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-76	SRP-SB-08-001 @ 2' bgs	Soluble	Solid	300.0	576340
490-168662-77	SRP-SB-08-001 @ 4' bgs	Soluble	Solid	300.0	576340
490-168662-79	SRP-SB-09-001 @ 0-1' bgs	Soluble	Solid	300.0	576340
490-168662-80	SRP-SB-09-001 @ 2' bgs	Soluble	Solid	300.0	576340
490-168662-81	SRP-SB-09-001 @ 4' bgs	Soluble	Solid	300.0	576340
MB 490-576340/1-A	Method Blank	Soluble	Solid	300.0	576340
LCS 490-576340/2-A	Lab Control Sample	Soluble	Solid	300.0	576340
LCSD 490-576340/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576340
490-168662-62 MS	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	300.0	576340
490-168662-62 MSD	SRP-SB-05-001 @ 4' bgs	Soluble	Solid	300.0	576340

### Leach Batch: 576388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-42	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	DI Leach	11
490-168662-43	SRP-SB-01-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-44	SRP-SB-01-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-45	SRP-SB-01-001 @ 7' bgs	Soluble	Solid	DI Leach	
490-168662-46	SRP-SB-02-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-47	SRP-SB-02-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-48	SRP-SB-02-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-49	SRP-SB-02-001 @ 6' bgs	Soluble	Solid	DI Leach	
490-168662-50	SRP-SB-03-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-51	SRP-SB-03-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-52	SRP-SB-03-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-53	SRP-SB-03-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-54	SRP-SB-03-001 @ 10' bgs	Soluble	Solid	DI Leach	
490-168662-55	SRP-SB-04-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-56	SRP-SB-04-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-57	SRP-SB-04-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-58	SRP-SB-04-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-59	SRP-SB-04-001 @ 11' bgs	Soluble	Solid	DI Leach	
490-168662-60	SRP-SB-05-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-61	SRP-SB-05-001 @ 2' bgs	Soluble	Solid	DI Leach	
MB 490-576388/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-576388/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-576388/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-168662-42 MS	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-42 MSD	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	DI Leach	

### Leach Batch: 576390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-64	SRP-SB-05-001 @ 10' bgs	Soluble	Solid	DI Leach	
490-168662-69	SRP-SB-06-001 @ 10' bgs	Soluble	Solid	DI Leach	
490-168662-74	SRP-SB-07-001 @ 9' bgs	Soluble	Solid	DI Leach	
490-168662-78	SRP-SB-08-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-82	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-83	HDP-SB-06-001 @ 0-1' bgs	Soluble	Solid	DI Leach	
490-168662-84	HDP-SB-06-001 @ 2' bgs	Soluble	Solid	DI Leach	
490-168662-85	HDP-SB-06-001 @ 4' bgs	Soluble	Solid	DI Leach	
490-168662-86	HDP-SB-06-001 @ 8' bgs	Soluble	Solid	DI Leach	
490-168662-87	HDP-SB-06-001 @ 11' bgs	Soluble	Solid	DI Leach	

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## HPLC/IC (Continued)

### Leach Batch: 576390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-88	HDP-SB-07-001 @ 0-1' bgs	Soluble	Solid	DI Leach	5
490-168662-89	HDP-SB-07-001 @ 2' bgs	Soluble	Solid	DI Leach	5
490-168662-90	HDP-SB-07-001 @ 4' bgs	Soluble	Solid	DI Leach	5
490-168662-91	HDP-SB-07-001 @ 8' bgs	Soluble	Solid	DI Leach	6
490-168662-92	HDP-SB-07-001 @ 10' bgs	Soluble	Solid	DI Leach	6
490-168662-93	HDP-SB-08-001 @ 0-1' bgs	Soluble	Solid	DI Leach	7
490-168662-94	HDP-SB-08-001 @ 2' bgs	Soluble	Solid	DI Leach	7
490-168662-95	HDP-SB-08-001 @ 4' bgs	Soluble	Solid	DI Leach	8
490-168662-96	HDP-SB-08-001 @ 7' bgs	Soluble	Solid	DI Leach	8
MB 490-576390/1-A	Method Blank	Soluble	Solid	DI Leach	9
LCS 490-576390/2-A	Lab Control Sample	Soluble	Solid	DI Leach	10
LCSD 490-576390/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	10
490-168662-82 MS	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	DI Leach	11
490-168662-82 MSD	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	DI Leach	11

### Analysis Batch: 576401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-20	NRP-SB-06-001 @ 4' bgs	Soluble	Solid	300.0	576127
490-168662-21	NRP-SB-06-001 @ 5.75' bgs	Soluble	Solid	300.0	576220
490-168662-24	NRP-SB-07-001 @ 4' bgs	Soluble	Solid	300.0	576220
490-168662-39	NRP-SB-12-001 @ 2' bgs	Soluble	Solid	300.0	576220
MB 490-576127/1-A	Method Blank	Soluble	Solid	300.0	576127
LCS 490-576127/2-A	Lab Control Sample	Soluble	Solid	300.0	576127
LCSD 490-576127/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576127

### Analysis Batch: 576430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-42	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-43	SRP-SB-01-001 @ 2' bgs	Soluble	Solid	300.0	576388
490-168662-46	SRP-SB-02-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-47	SRP-SB-02-001 @ 2' bgs	Soluble	Solid	300.0	576388
490-168662-48	SRP-SB-02-001 @ 4' bgs	Soluble	Solid	300.0	576388
490-168662-49	SRP-SB-02-001 @ 6' bgs	Soluble	Solid	300.0	576388
490-168662-50	SRP-SB-03-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-51	SRP-SB-03-001 @ 2' bgs	Soluble	Solid	300.0	576388
490-168662-52	SRP-SB-03-001 @ 4' bgs	Soluble	Solid	300.0	576388
490-168662-53	SRP-SB-03-001 @ 8' bgs	Soluble	Solid	300.0	576388
490-168662-54	SRP-SB-03-001 @ 10' bgs	Soluble	Solid	300.0	576388
490-168662-55	SRP-SB-04-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-56	SRP-SB-04-001 @ 2' bgs	Soluble	Solid	300.0	576388
490-168662-57	SRP-SB-04-001 @ 4' bgs	Soluble	Solid	300.0	576388
490-168662-58	SRP-SB-04-001 @ 8' bgs	Soluble	Solid	300.0	576388
490-168662-59	SRP-SB-04-001 @ 11' bgs	Soluble	Solid	300.0	576388
490-168662-60	SRP-SB-05-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-61	SRP-SB-05-001 @ 2' bgs	Soluble	Solid	300.0	576388
MB 490-576388/1-A	Method Blank	Soluble	Solid	300.0	576388
LCS 490-576388/2-A	Lab Control Sample	Soluble	Solid	300.0	576388
LCSD 490-576388/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576388
490-168662-42 MS	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	300.0	576388
490-168662-42 MSD	SRP-SB-01-001 @ 0-1' bgs	Soluble	Solid	300.0	576388

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

## HPLC/IC (Continued)

### Analysis Batch: 576448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-64	SRP-SB-05-001 @ 10' bgs	Soluble	Solid	300.0	576390
490-168662-69	SRP-SB-06-001 @ 10' bgs	Soluble	Solid	300.0	576390
490-168662-74	SRP-SB-07-001 @ 9' bgs	Soluble	Solid	300.0	576390
490-168662-78	SRP-SB-08-001 @ 8' bgs	Soluble	Solid	300.0	576390
490-168662-82	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	300.0	576390
490-168662-83	HDP-SB-06-001 @ 0-1' bgs	Soluble	Solid	300.0	576390
490-168662-84	HDP-SB-06-001 @ 2' bgs	Soluble	Solid	300.0	576390
490-168662-85	HDP-SB-06-001 @ 4' bgs	Soluble	Solid	300.0	576390
490-168662-86	HDP-SB-06-001 @ 8' bgs	Soluble	Solid	300.0	576390
490-168662-87	HDP-SB-06-001 @ 11' bgs	Soluble	Solid	300.0	576390
490-168662-88	HDP-SB-07-001 @ 0-1' bgs	Soluble	Solid	300.0	576390
490-168662-89	HDP-SB-07-001 @ 2' bgs	Soluble	Solid	300.0	576390
490-168662-90	HDP-SB-07-001 @ 4' bgs	Soluble	Solid	300.0	576390
490-168662-91	HDP-SB-07-001 @ 8' bgs	Soluble	Solid	300.0	576390
490-168662-92	HDP-SB-07-001 @ 10' bgs	Soluble	Solid	300.0	576390
490-168662-93	HDP-SB-08-001 @ 0-1' bgs	Soluble	Solid	300.0	576390
490-168662-94	HDP-SB-08-001 @ 2' bgs	Soluble	Solid	300.0	576390
490-168662-95	HDP-SB-08-001 @ 4' bgs	Soluble	Solid	300.0	576390
490-168662-96	HDP-SB-08-001 @ 7' bgs	Soluble	Solid	300.0	576390
MB 490-576390/1-A	Method Blank	Soluble	Solid	300.0	576390
LCS 490-576390/2-A	Lab Control Sample	Soluble	Solid	300.0	576390
LCSD 490-576390/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	576390
490-168662-82 MS	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	300.0	576390
490-168662-82 MSD	SRP-SB-09-001 @ 8' bgs	Soluble	Solid	300.0	576390

### Analysis Batch: 576767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-168662-44	SRP-SB-01-001 @ 4' bgs	Soluble	Solid	300.0	576388
490-168662-45	SRP-SB-01-001 @ 7' bgs	Soluble	Solid	300.0	576388
MB 490-576767/3	Method Blank	Total/NA	Solid	300.0	
LCS 490-576767/4	Lab Control Sample	Total/NA	Solid	300.0	
LCSD 490-576767/5	Lab Control Sample Dup	Total/NA	Solid	300.0	

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

**Lab Sample ID: 490-168662-1**

Matrix: Solid

Date Collected: 02/14/19 09:27

Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0177 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 09:47	JHS	TAL NSH

**Client Sample ID: NRP-BG-001 @ 2' bgs**

**Lab Sample ID: 490-168662-2**

Matrix: Solid

Date Collected: 02/14/19 09:27

Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0444 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 10:31	JHS	TAL NSH

**Client Sample ID: NRP-BG-001 @ 4' bgs**

**Lab Sample ID: 490-168662-3**

Matrix: Solid

Date Collected: 02/14/19 09:30

Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 19:20	SW1	TAL NSH
Total/NA	Prep	5030B			5.49 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 00:27	AK1	TAL NSH
Total/NA	Prep	3550C			25.14 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 04:35	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0318 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 10:46	JHS	TAL NSH

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

**Lab Sample ID: 490-168662-4**

Matrix: Solid

Date Collected: 02/14/19 09:25

Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9643 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 11:01	JHS	TAL NSH

**Client Sample ID: SRP-BG-001@ 2' bgs**

**Lab Sample ID: 490-168662-5**

Matrix: Solid

Date Collected: 02/14/19 09:26

Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9805 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 11:16	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-BG-001@ 4' bgs**

Date Collected: 02/14/19 09:29

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0267 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 11:30	JHS	TAL NSH

**Client Sample ID: SRP-BG-001@ 8' bgs**

Date Collected: 02/14/19 09:35

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9721 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 11:45	JHS	TAL NSH

**Client Sample ID: SRP-BG-001@ 10' bgs**

Date Collected: 02/14/19 09:44

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.89 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 19:48	SW1	TAL NSH
Total/NA	Prep	5030B			5.00 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 01:01	AK1	TAL NSH
Total/NA	Prep	3550C			25.44 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 05:26	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9798 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 12:00	JHS	TAL NSH

**Client Sample ID: NRP-SB-01-001 @ 0-1' bgs**

Date Collected: 02/14/19 10:18

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-9**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9576 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 12:15	JHS	TAL NSH

**Client Sample ID: NRP-SB-01-001 @ 1.5' bgs**

Date Collected: 02/14/19 10:21

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-10**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.06 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 20:18	SW1	TAL NSH
Total/NA	Prep	5030B			5.22 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 01:35	AK1	TAL NSH
Total/NA	Prep	3550C			25.62 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-01-001 @ 1.5' bgs**

Date Collected: 02/14/19 10:21

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-10**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1			576719	02/22/19 05:42	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0117 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 12:30	JHS	TAL NSH

**Client Sample ID: NRP-SB-02-001 @ 0-1' bgs**

Date Collected: 02/14/19 10:30

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-11**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0407 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 13:14	JHS	TAL NSH

**Client Sample ID: NRP-SB-02-001 @ 2' bgs**

Date Collected: 02/14/19 10:36

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 20:47	SW1	TAL NSH
Total/NA	Prep	5030B			5.40 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 02:08	AK1	TAL NSH
Total/NA	Prep	3550C			25.06 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 05:59	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0246 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 13:29	JHS	TAL NSH

**Client Sample ID: NRP-SB-03-001 @ 0-1' bgs**

Date Collected: 02/14/19 10:44

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-13**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.41 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 21:16	SW1	TAL NSH
Total/NA	Prep	5030B			5.27 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 02:42	AK1	TAL NSH
Total/NA	Prep	3550C			25.29 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 06:16	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0217 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 13:44	JHS	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-04-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-14**

Matrix: Solid

Date Collected: 02/14/19 10:55  
Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0237 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 13:59	JHS	TAL NSH

**Client Sample ID: NRP-SB-04-001 @ 1.5' bgs**

**Lab Sample ID: 490-168662-15**

Matrix: Solid

Date Collected: 02/14/19 11:02  
Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 21:46	SW1	TAL NSH
Total/NA	Prep	5030B			5.65 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 03:15	AK1	TAL NSH
Total/NA	Prep	3550C			25.28 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 06:32	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9979 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 14:14	JHS	TAL NSH

**Client Sample ID: NRP-SB-05-001 @ 0-1' bgs**

**Lab Sample ID: 490-168662-16**

Matrix: Solid

Date Collected: 02/14/19 11:10  
Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0483 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 14:28	JHS	TAL NSH

**Client Sample ID: NRP-SB-05-001 @ 1.75' bgs**

**Lab Sample ID: 490-168662-17**

Matrix: Solid

Date Collected: 02/14/19 11:15  
Date Received: 02/16/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.27 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 22:15	SW1	TAL NSH
Total/NA	Prep	5030B			5.41 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 03:49	AK1	TAL NSH
Total/NA	Prep	3550C			25.30 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 06:49	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0057 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 14:43	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-06-001 @ 0-1' bgs**

Date Collected: 02/14/19 11:25

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9643 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 14:58	JHS	TAL NSH

**Client Sample ID: NRP-SB-06-001 @ 2' bgs**

Date Collected: 02/14/19 11:29

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-19**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9829 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		1			576270	02/19/19 15:13	JHS	TAL NSH

**Client Sample ID: NRP-SB-06-001 @ 4' bgs**

Date Collected: 02/14/19 11:36

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0269 g	30 mL	576127	02/19/19 07:12	JHS	TAL NSH
Soluble	Analysis	300.0		2			576401	02/20/19 09:12	JHS	TAL NSH

**Client Sample ID: NRP-SB-06-001 @ 5.75' bgs**

Date Collected: 02/14/19 12:08

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.15 g	5.0 mL	576258	02/19/19 12:51	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 22:46	SW1	TAL NSH
Total/NA	Prep	5030B			5.39 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 04:23	AK1	TAL NSH
Total/NA	Prep	3550C			25.58 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 07:06	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0061 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		2			576401	02/20/19 09:27	JHS	TAL NSH

**Client Sample ID: NRP-SB-07-001 @ 0-1' bgs**

Date Collected: 02/14/19 12:21

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9979 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 18:10	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-07-001 @ 2' bgs**

Date Collected: 02/14/19 12:24

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0376 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 18:25	JHS	TAL NSH

**Client Sample ID: NRP-SB-07-001 @ 4' bgs**

Date Collected: 02/14/19 12:30

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.39 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 23:17	SW1	TAL NSH
Total/NA	Prep	5030B			5.42 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 04:56	AK1	TAL NSH
Total/NA	Prep	3550C			25.35 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 07:56	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9897 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		2			576401	02/20/19 09:57	JHS	TAL NSH

**Client Sample ID: NRP-SB-08-001 @ 0-1' bgs**

Date Collected: 02/14/19 12:45

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-25**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0145 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 18:54	JHS	TAL NSH

**Client Sample ID: NRP-SB-08-001 @ 2' bgs**

Date Collected: 02/14/19 12:51

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-26**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0483 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 19:09	JHS	TAL NSH

**Client Sample ID: NRP-SB-08-001 @ 4' bgs**

Date Collected: 02/14/19 12:58

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-27**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9812 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 19:24	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-08-001 @ 8' bgs**

Date Collected: 02/14/19 13:22

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-28**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9566 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 19:39	JHS	TAL NSH

**Client Sample ID: NRP-SB-08-001 @ 9' bgs**

Date Collected: 02/14/19 13:33

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-29**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.10 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/20/19 23:48	SW1	TAL NSH
Total/NA	Prep	5030B			5.85 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 05:30	AK1	TAL NSH
Total/NA	Prep	3550C			25.26 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 08:13	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0408 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 19:53	JHS	TAL NSH

**Client Sample ID: NRP-SB-09-001 @ 0-1' bgs**

Date Collected: 02/14/19 13:46

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-30**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0424 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 20:08	JHS	TAL NSH

**Client Sample ID: NRP-SB-09-001 @ 2' bgs**

Date Collected: 02/14/19 13:49

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-31**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9850 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 20:53	JHS	TAL NSH

**Client Sample ID: NRP-SB-09-001 @ 3.5' bgs**

Date Collected: 02/14/19 13:55

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-32**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.04 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 00:18	SW1	TAL NSH
Total/NA	Prep	5030B			5.17 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 06:03	AK1	TAL NSH
Total/NA	Prep	3550C			25.62 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-09-001 @ 3.5' bgs**

Date Collected: 02/14/19 13:55

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-32**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1			576719	02/22/19 08:30	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9851 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 21:07	JHS	TAL NSH

**Client Sample ID: NRP-SB-10-001 @ 0-1' bgs**

Date Collected: 02/14/19 13:18

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-33**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0382 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 21:22	JHS	TAL NSH

**Client Sample ID: NRP-SB-10-001 @ 2' bgs**

Date Collected: 02/14/19 13:18

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-34**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9790 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 21:37	JHS	TAL NSH

**Client Sample ID: NRP-SB-10-001 @ 3' bgs**

Date Collected: 02/14/19 13:18

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-35**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 00:48	SW1	TAL NSH
Total/NA	Prep	5030B			5.80 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 06:37	AK1	TAL NSH
Total/NA	Prep	3550C			25.13 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 08:47	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0124 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 21:52	JHS	TAL NSH

**Client Sample ID: NRP-SB-11-001 @ 0-1' bgs**

Date Collected: 02/14/19 14:33

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-36**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9711 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 22:07	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-11-001 @ 2' bgs**

Date Collected: 02/14/19 14:33

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-37**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 01:18	SW1	TAL NSH
Total/NA	Prep	5030B			5.27 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 07:10	AK1	TAL NSH
Total/NA	Prep	3550C			25.20 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 13:23	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0359 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 22:22	JHS	TAL NSH

**Client Sample ID: NRP-SB-12-001 @ 0-1' bgs**

Date Collected: 02/14/19 14:48

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-38**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9915 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		1			576278	02/19/19 22:37	JHS	TAL NSH

**Client Sample ID: NRP-SB-12-001 @ 2' bgs**

Date Collected: 02/14/19 14:48

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-39**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.09 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 01:47	SW1	TAL NSH
Total/NA	Prep	5030B			5.26 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 07:44	AK1	TAL NSH
Total/NA	Prep	3550C			25.14 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 13:40	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9639 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH
Soluble	Analysis	300.0		2			576401	02/20/19 10:12	JHS	TAL NSH

**Client Sample ID: NRP-SB-13-001 @ 0-1' bgs**

Date Collected: 02/14/19 15:16

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-40**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.38 g	5.0 mL	576258	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 02:16	SW1	TAL NSH
Total/NA	Prep	5030B			5.52 g	5.0 mL	576251	02/19/19 13:47	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 08:18	AK1	TAL NSH
Total/NA	Prep	3550C			25.02 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 14:32	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0395 g	30 mL	576220	02/19/19 11:10	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: NRP-SB-13-001 @ 0-1' bgs**

Date Collected: 02/14/19 15:16  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-40**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1			576278	02/19/19 23:06	JHS	TAL NSH

**Client Sample ID: SRP-SB-01-001 @ 0-1' bgs**

Date Collected: 02/14/19 14:46  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-42**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0271 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 12:10	SW1	TAL NSH

**Client Sample ID: SRP-SB-01-001 @ 2' bgs**

Date Collected: 02/14/19 14:47  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-43**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9892 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 12:55	SW1	TAL NSH

**Client Sample ID: SRP-SB-01-001 @ 4' bgs**

Date Collected: 02/14/19 14:51  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-44**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0276 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		5			576767	02/21/19 13:59	SW1	TAL NSH

**Client Sample ID: SRP-SB-01-001 @ 7' bgs**

Date Collected: 02/14/19 15:02  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-45**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576553	02/21/19 02:44	SW1	TAL NSH
Total/NA	Prep	5030B			5.04 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 08:51	AK1	TAL NSH
Total/NA	Prep	3550C			25.45 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576489	02/21/19 05:08	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0315 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		5			576767	02/21/19 14:14	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-02-001 @ 0-1' bgs**

Date Collected: 02/14/19 14:29

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-46**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0214 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 13:39	SW1	TAL NSH

**Client Sample ID: SRP-SB-02-001 @ 2' bgs**

Date Collected: 02/14/19 14:30

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-47**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0228 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 13:54	SW1	TAL NSH

**Client Sample ID: SRP-SB-02-001 @ 4' bgs**

Date Collected: 02/14/19 14:33

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-48**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9810 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 14:09	SW1	TAL NSH

**Client Sample ID: SRP-SB-02-001 @ 6' bgs**

Date Collected: 02/14/19 14:41

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-49**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.39 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576640	02/21/19 15:08	P1B	TAL NSH
Total/NA	Prep	5030B			5.06 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 09:25	AK1	TAL NSH
Total/NA	Prep	3550C			25.39 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 09:04	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9966 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 14:24	SW1	TAL NSH

**Client Sample ID: SRP-SB-03-001 @ 0-1' bgs**

Date Collected: 02/14/19 15:07

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-50**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9863 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 14:39	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-03-001 @ 2' bgs**

Date Collected: 02/14/19 15:09

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-51**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0271 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 14:54	SW1	TAL NSH

**Client Sample ID: SRP-SB-03-001 @ 4' bgs**

Date Collected: 02/14/19 15:10

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-52**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0302 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 15:38	SW1	TAL NSH

**Client Sample ID: SRP-SB-03-001 @ 8' bgs**

Date Collected: 02/14/19 15:16

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-53**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9874 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 15:53	SW1	TAL NSH

**Client Sample ID: SRP-SB-03-001 @ 10' bgs**

Date Collected: 02/14/19 15:19

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-54**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.49 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576640	02/21/19 15:38	P1B	TAL NSH
Total/NA	Prep	5030B			5.12 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 09:58	AK1	TAL NSH
Total/NA	Prep	3550C			25.26 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576489	02/21/19 05:42	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9833 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 16:07	SW1	TAL NSH

**Client Sample ID: SRP-SB-04-001 @ 0-1' bgs**

Date Collected: 02/14/19 13:44

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-55**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0157 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 16:22	SW1	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-04-001 @ 2' bgs**

Date Collected: 02/14/19 13:45

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-56**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0115 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 16:37	SW1	TAL NSH

**Client Sample ID: SRP-SB-04-001 @ 4' bgs**

Date Collected: 02/14/19 13:46

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-57**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9908 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 16:52	SW1	TAL NSH

**Client Sample ID: SRP-SB-04-001 @ 8' bgs**

Date Collected: 02/14/19 13:55

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-58**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9969 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 17:06	SW1	TAL NSH

**Client Sample ID: SRP-SB-04-001 @ 11' bgs**

Date Collected: 02/14/19 14:00

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-59**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.14 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576640	02/21/19 16:08	P1B	TAL NSH
Total/NA	Prep	5030B			5.61 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 10:32	AK1	TAL NSH
Total/NA	Prep	3550C			25.10 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 09:21	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0347 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 17:21	SW1	TAL NSH

**Client Sample ID: SRP-SB-05-001 @ 0-1' bgs**

Date Collected: 02/14/19 12:44

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-60**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0280 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 17:36	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-05-001 @ 2' bgs**

Date Collected: 02/14/19 12:46

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-61**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0312 g	30 mL	576388	02/20/19 07:28	JHS	TAL NSH
Soluble	Analysis	300.0		1			576430	02/20/19 17:51	SW1	TAL NSH

**Client Sample ID: SRP-SB-05-001 @ 4' bgs**

Date Collected: 02/14/19 12:49

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-62**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9887 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 03:00	JHS	TAL NSH

**Client Sample ID: SRP-SB-05-001 @ 8' bgs**

Date Collected: 02/14/19 13:14

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-63**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0192 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 03:50	JHS	TAL NSH

**Client Sample ID: SRP-SB-05-001 @ 10' bgs**

Date Collected: 02/14/19 13:22

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-64**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.09 g	5.0 mL	576258	02/19/19 12:43	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	576640	02/21/19 16:36	P1B	TAL NSH
Total/NA	Prep	5030B			5.28 g	5.0 mL	576251	02/19/19 12:40	DHC	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/23/19 11:06	AK1	TAL NSH
Total/NA	Prep	3550C			25.43 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576489	02/21/19 06:16	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0431 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 00:31	SW1	TAL NSH

**Client Sample ID: SRP-SB-06-001 @ 0-1' bgs**

Date Collected: 02/14/19 12:19

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-65**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0066 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 04:06	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-06-001 @ 2' bgs**

Date Collected: 02/14/19 12:20

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-66**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9721 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		2			576373	02/20/19 08:32	JHS	TAL NSH

**Client Sample ID: SRP-SB-06-001 @ 4' bgs**

Date Collected: 02/14/19 12:22

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-67**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0216 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 04:40	JHS	TAL NSH

**Client Sample ID: SRP-SB-06-001 @ 8' bgs**

Date Collected: 02/14/19 12:31

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-68**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0337 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 04:56	JHS	TAL NSH

**Client Sample ID: SRP-SB-06-001 @ 10' bgs**

Date Collected: 02/14/19 12:34

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-69**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.99 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 16:48	S1S	TAL NSH
Total/NA	Prep	5030B			5.44 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 15:37	AK1	TAL NSH
Total/NA	Prep	3550C			25.40 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 09:38	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0208 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 00:45	SW1	TAL NSH

**Client Sample ID: SRP-SB-07-001 @ 0-1' bgs**

Date Collected: 02/14/19 11:53

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-70**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0167 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 05:13	JHS	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-07-001 @ 2' bgs**

Date Collected: 02/14/19 11:55  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-71**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9871 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 05:29	JHS	TAL NSH

**Client Sample ID: SRP-SB-07-001 @ 4' bgs**

Date Collected: 02/14/19 11:57  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-72**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0094 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 05:46	JHS	TAL NSH

**Client Sample ID: SRP-SB-07-001 @ 8' bgs**

Date Collected: 02/14/19 12:11  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-73**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9754 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 06:03	JHS	TAL NSH

**Client Sample ID: SRP-SB-07-001 @ 9' bgs**

Date Collected: 02/14/19 12:13  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-74**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.21 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 17:17	S1S	TAL NSH
Total/NA	Prep	5030B			5.14 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 16:11	AK1	TAL NSH
Total/NA	Prep	3550C			25.45 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 09:55	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0400 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 01:00	SW1	TAL NSH

**Client Sample ID: SRP-SB-08-001 @ 0-1' bgs**

Date Collected: 02/14/19 11:32  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-75**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0208 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 06:52	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-08-001 @ 2' bgs**

Date Collected: 02/14/19 11:33  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-76**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9946 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 07:09	JHS	TAL NSH

**Client Sample ID: SRP-SB-08-001 @ 4' bgs**

Date Collected: 02/14/19 11:36  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-77**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0022 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 07:25	JHS	TAL NSH

**Client Sample ID: SRP-SB-08-001 @ 8' bgs**

Date Collected: 02/14/19 11:50  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-78**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 17:47	S1S	TAL NSH
Total/NA	Prep	5030B			5.68 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 16:45	AK1	TAL NSH
Total/NA	Prep	3550C			25.50 g	1 mL	576297	02/19/19 14:18	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/22/19 10:11	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9773 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 01:15	SW1	TAL NSH

**Client Sample ID: SRP-SB-09-001 @ 0-1' bgs**

Date Collected: 02/14/19 11:09  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-79**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0302 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 07:42	JHS	TAL NSH

**Client Sample ID: SRP-SB-09-001 @ 2' bgs**

Date Collected: 02/14/19 11:11  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-80**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9589 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 07:59	JHS	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: SRP-SB-09-001 @ 4' bgs**

Date Collected: 02/14/19 11:15  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-81**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0153 g	30 mL	576340	02/19/19 16:28	SOO	TAL NSH
Soluble	Analysis	300.0		1			576373	02/20/19 08:15	JHS	TAL NSH

**Client Sample ID: SRP-SB-09-001 @ 8' bgs**

Date Collected: 02/14/19 11:28  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-82**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.10 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 18:16	S1S	TAL NSH
Total/NA	Prep	5030B			5.49 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 17:18	AK1	TAL NSH
Total/NA	Prep	3550C			25.33 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 14:49	AK1	TAL NSH
Soluble	Leach	DI Leach			2.9864 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 19:49	SW1	TAL NSH

**Client Sample ID: HDP-SB-06-001 @ 0-1' bgs**

Date Collected: 02/14/19 14:09  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-83**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9949 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 20:33	SW1	TAL NSH

**Client Sample ID: HDP-SB-06-001 @ 2' bgs**

Date Collected: 02/14/19 14:11  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-84**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0217 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 20:48	SW1	TAL NSH

**Client Sample ID: HDP-SB-06-001 @ 4' bgs**

Date Collected: 02/14/19 14:12  
Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-85**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9645 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 21:03	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-06-001 @ 8' bgs**

Date Collected: 02/14/19 14:20

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-86**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0295 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 21:18	SW1	TAL NSH

**Client Sample ID: HDP-SB-06-001 @ 11' bgs**

Date Collected: 02/14/19 14:23

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-87**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.22 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 18:46	S1S	TAL NSH
Total/NA	Prep	5030B			5.93 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 17:52	AK1	TAL NSH
Total/NA	Prep	3550C			25.12 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 15:06	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0378 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 21:33	SW1	TAL NSH

**Client Sample ID: HDP-SB-07-001 @ 0-1' bgs**

Date Collected: 02/14/19 09:56

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-88**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0457 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 21:47	SW1	TAL NSH

**Client Sample ID: HDP-SB-07-001 @ 2' bgs**

Date Collected: 02/14/19 10:00

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-89**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0041 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 22:02	SW1	TAL NSH

**Client Sample ID: HDP-SB-07-001 @ 4' bgs**

Date Collected: 02/14/19 10:01

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-90**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0454 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 22:17	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-07-001 @ 8' bgs**

Date Collected: 02/14/19 10:08

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-91**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0147 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 22:32	SW1	TAL NSH

**Client Sample ID: HDP-SB-07-001 @ 10' bgs**

Date Collected: 02/14/19 10:12

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-92**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.61 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 19:16	S1S	TAL NSH
Total/NA	Prep	5030B			5.69 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 18:26	AK1	TAL NSH
Total/NA	Prep	3550C			25.20 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 15:23	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0202 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 23:16	SW1	TAL NSH

**Client Sample ID: HDP-SB-08-001 @ 0-1' bgs**

Date Collected: 02/14/19 15:23

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-93**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9634 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 23:31	SW1	TAL NSH

**Client Sample ID: HDP-SB-08-001 @ 2' bgs**

Date Collected: 02/14/19 15:25

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-94**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0328 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/20/19 23:46	SW1	TAL NSH

**Client Sample ID: HDP-SB-08-001 @ 4' bgs**

Date Collected: 02/14/19 15:27

Date Received: 02/16/19 10:25

**Lab Sample ID: 490-168662-95**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0095 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 00:01	SW1	TAL NSH

TestAmerica Nashville

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

**Client Sample ID: HDP-SB-08-001 @ 7' bgs**

**Date Collected: 02/14/19 15:33**

**Date Received: 02/16/19 10:25**

**Lab Sample ID: 490-168662-96**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.41 g	5.0 mL	576019	02/18/19 13:24	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 g	575981	02/18/19 19:45	S1S	TAL NSH
Total/NA	Prep	5030B			5.13 g	5.0 mL	576017	02/18/19 13:23	JLP	TAL NSH
Total/NA	Analysis	8015B		1	0.1 mL	5 mL	576634	02/21/19 18:59	AK1	TAL NSH
Total/NA	Prep	3550C			25.16 g	1 mL	576332	02/19/19 16:17	AMD	TAL NSH
Total/NA	Analysis	8015B		1			576719	02/21/19 15:40	AK1	TAL NSH
Soluble	Leach	DI Leach			3.0432 g	30 mL	576390	02/20/19 07:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			576448	02/21/19 00:16	SW1	TAL NSH

**Laboratory References:**

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

## Method Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

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

## Accreditation/Certification Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO-Seven Rivers Queen

TestAmerica Job ID: 490-168662-1

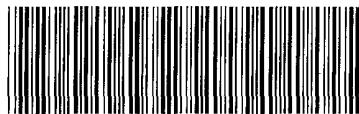
### Laboratory: TestAmerica Nashville

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		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	06-30-19 *
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 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
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	12-31-19
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	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
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	12-30-19
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	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

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

TestAmerica Nashville



## COOLER RECEIPT FORM

Cooler Received/Opened On 2/16/2019 @ 1025Time Samples Removed From Cooler 1628 Time Samples Placed In Storage 1743 (2 Hour Window)1. Tracking # 6400 (last 4 digits FedEx) Courier: FedExIR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius3. 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?

YES  NO  NA If yes, how many and where: 1 FrontYES  NO  NA 

5. Were the seals intact, signed, and dated correctly?

YES  NO  NA 

6. Were custody papers inside cooler?

YES  NO  NA I certify that I opened the cooler and answered questions 1-6 (initial) 6H7. Were custody seals on containers: YES  and Intact YES...NO  NA Were these signed and dated correctly? YES  NO  NA 8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES  NO  NA 11. Were all container labels complete (#, date, signed, pres., etc.)? YES  NO  NA 12. Did all container labels and tags agree with custody papers? YES  NO  NA 

13a. Were VOA vials received?

YES  NO  NA b. Was there any observable headspace present in any VOA vial? YES...NO  NA 

Larger than this.

14. Was there a Trip Blank in this cooler? YES  NO  NA If multiple coolers, sequence # AOTI certify that I unloaded the cooler and answered questions 7-14 (initial) AOT15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO  NA b. Did the bottle labels indicate that the correct preservatives were used YES  NO  NA 16. Was residual chlorine present? YES  NO  NA I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AOT17. Were custody papers properly filled out (ink, signed, etc.)? YES  NO  NA 18. Did you sign the custody papers in the appropriate place? YES  NO  NA 19. Were correct containers used for the analysis requested? YES  NO  NA 20. Was sufficient amount of sample sent in each container? YES  NO  NA I certify that I entered this project into LIMS and answered questions 17-20 (initial) AOTI certify that I attached a label with the unique LIMS number to each container (initial) AOT21. Were there Non-Conformance issues at login? YES  NO  Was a NCM generated? YES  NO  NA 107  
2/16/19107  
2/16/19



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM

Cooler Received/Opened On 2/16/2019 @ 1025

Time Samples Removed From Cooler 1626 Time Samples Placed In Storage 1743 (2 Hour Window)

1. Tracking # 6342 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 24 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?

Front

YES... NO... NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly?  YES... NO... NA

6. Were custody papers inside cooler?

GH

YES... NO... NA

I certify that I opened the cooler and answered questions 1-6 (initial) \_\_\_\_\_

7. Were custody seals on containers: YES  NO  and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?  YES... NO... NA

11. Were all container labels complete (#, date, signed, pres., etc)?  YES... NO... NA

12. Did all container labels and tags agree with custody papers?  YES... NO... NA

13a. Were VOA vials received?

YES... NO... NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES... NO... NA If multiple coolers, sequence # A07

I certify that I unloaded the cooler and answered questions 7-14 (initial) A07

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used  YES... NO... NA

16. Was residual chlorine present?  YES... NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) A07

17. Were custody papers properly filled out (ink, signed, etc)?  YES... NO... NA

18. Did you sign the custody papers in the appropriate place?  YES... NO... NA

19. Were correct containers used for the analysis requested?  YES... NO... NA

20. Was sufficient amount of sample sent in each container?  YES... NO... NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) A07

I certify that I attached a label with the unique LIMS number to each container (initial) A07

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# \_\_\_\_\_

## COOLER RECEIPT FORM

Cooler Received/Opened On 2/16/2019 @ 1025Time Samples Removed From Cooler 1625 Time Samples Placed In Storage 1743 (2 Hour Window)1. Tracking # 2234 (last 4 digits, FedEx) Courier: FedExIR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A2. Temperature of rep. sample or temp blank when opened: 16 Degrees Celsius3. 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?

1 frontYES  NO  NA 

YES...NO...NA

5. Were the seals intact, signed, and dated correctly?

YES...NO...NA

6. Were custody papers inside cooler?

6480 642-16-19YES  NO  NAI certify that I opened the cooler and answered questions 1-6 (initial) 64807. Were custody seals on containers: YES  NO  and Intact YES...NO...NAWere these signed and dated correctly? YES  NO  NA8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES  NO  NA11. Were all container labels complete (#, date, signed, pres., etc)? YES  NO  NA12. Did all container labels and tags agree with custody papers? YES  NO  NA13a. Were VOA vials received? YES  NO  NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES  NO  NA If multiple coolers, sequence # ADTI certify that I unloaded the cooler and answered questions 7-14 (initial) ADT15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO  NAb. Did the bottle labels indicate that the correct preservatives were used YES  NO  NA16. Was residual chlorine present? YES  NO  NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ADT17. Were custody papers properly filled out (ink, signed, etc)? YES  NO  NA18. Did you sign the custody papers in the appropriate place? YES  NO  NA19. Were correct containers used for the analysis requested? YES  NO  NA20. Was sufficient amount of sample sent in each container? YES  NO  NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) ADTI certify that I attached a label with the unique LIMS number to each container (initial) ADT21. Were there Non-Conformance issues at login? YES  NO Was a NCM generated? YES  NO ...# \_\_\_\_\_

# TestAmerica

TEST AMERICA INC. ENVIRONMENTAL TESTING

Midland  
#264

## Chain of Custody Record

2960 Foster Creighton Drive

Nashville, TN 37204

Phone (615) 726-0177 Fax (615) 726-3404

### Client Information

Client Contact:  
Debi Sport Moore

Company:  
Sport Environmental Services LLC

Address:  
502 N Big Spring St

City:  
Midland

State, Zip:  
TX, 79701

Phone:  
432-683-1100(Tel)

Email:  
debi@sportenv.com

Project Name:  
XTO - Seven Rivers Queen

Site:  
SSOW#:

Sampler:  
Debi Moore

Phone:  
(432) 683-1100

Lab FM:  
Gambill, Jennifer

E-Mail:  
jennifer.gambill@testamericanainc.com

### Analysis Requested

Job #:

Page 1 of 15

Job #:

COC No:  
490-96301-26265.1

Carrier Tracking No(s):

Page:

Page 1 of 15

Job #:

Total Number of Contaminants:

Preservation Codes:

A - HCl

B - NaOH

M - Hexane

N - None

O - AsNaCl2

C - Zn Acetate

D - Nitric Acid

P - Na2O4S

Q - Na2SO3

R - Na2S2O3

S - H2SO4

T - TSP Dodecahydrate

I - Iodine

U - Acetone

V - MCA

W - pH 4-5

Z - other (specify)

Other:

Midland  
#264

## **Chain of Custody Record**

Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404



**TestAmerica Nashville**  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404

**Chain of Custody Record**

**Midland** #264

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <b>Debi Moore</b>	Lab PM: <b>Gambill, Jennifer</b>	Carrier Tracking No(s): <b>COC No: 490-96301-26265.4</b>																																				
Client Contact: <b>Debi Sport Moore</b>	Phone: <b>(432) 603-1100</b>	E-Mail: <b>jennifer.gambill@testamericainc.com</b>	Page: <b>Page 4 of 15</b>	Job #: <b></b>																																				
<b>Analysis Requested</b>																																								
<p><b>Preservation Codes:</b></p> <table border="0"> <tr><td>A - HCl</td><td>M - Hexane</td></tr> <tr><td>B - NaOH</td><td>N - None</td></tr> <tr><td>C - Zn Acetate</td><td>O - AsNaO2</td></tr> <tr><td>D - Nitric Acid</td><td>P - Na2O4S</td></tr> <tr><td>E - NaHSO4</td><td>Q - Na2SO3</td></tr> <tr><td>F - MeOH</td><td>R - Na2S2O3</td></tr> <tr><td>G - Amchlor</td><td>S - H2SO4</td></tr> <tr><td>H - Ascorbic Acid</td><td>T - TSP Dodechydrate</td></tr> <tr><td>I - Ice</td><td>U - Acetone</td></tr> <tr><td>J - Di Water</td><td>V - MCAA</td></tr> <tr><td>K - EDTA</td><td>W - pH 4.5</td></tr> <tr><td>L - EDA</td><td>Z - other (specify)</td></tr> <tr><td colspan="2">Other: _____</td></tr> </table> <p><b>Total Number of Containers:</b> <input checked="" type="checkbox"/> <b>1</b></p>					A - HCl	M - Hexane	B - NaOH	N - None	C - Zn Acetate	O - AsNaO2	D - Nitric Acid	P - Na2O4S	E - NaHSO4	Q - Na2SO3	F - MeOH	R - Na2S2O3	G - Amchlor	S - H2SO4	H - Ascorbic Acid	T - TSP Dodechydrate	I - Ice	U - Acetone	J - Di Water	V - MCAA	K - EDTA	W - pH 4.5	L - EDA	Z - other (specify)	Other: _____											
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<p><b>Sample Identification</b></p> <table border="0"> <tr> <td>Sample Date</td> <td>Sample Time</td> <td>Sample Type (C=Comp, G=grab)</td> <td>Matrix (W=water, S=solid, C=water/soil, B=tissue, A=air)</td> <td>Special Instructions/Note:</td> </tr> <tr> <td>8016B-DB-RDO, 8016B-GRO, 8260B</td> <td>8016B</td> <td>Filtered Sample (Yes or No): <input checked="" type="checkbox"/></td> <td>Chloride</td> <td><input checked="" type="checkbox"/> N</td> </tr> </table>					Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, C=water/soil, B=tissue, A=air)	Special Instructions/Note:	8016B-DB-RDO, 8016B-GRO, 8260B	8016B	Filtered Sample (Yes or No): <input checked="" type="checkbox"/>	Chloride	<input checked="" type="checkbox"/> N																										
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NRP-SB-05-001 @ 12'bgs	solid	Loc: 490 <b>168662</b>																																						
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<p><b>Possible Hazard Identification</b></p> <p><input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological</p> <p>Deliverable Requested: I, II, III, IV, Other (specify) _____</p>																																								
<p>Empty Kit Relinquished by: <b>Debi Moore</b> Date: <b>2-15-19</b> Time: <b>1546</b> Received by: <b>John Murphy</b> Date/Time: <b>2-15-19 1550</b> Company: <b>TestAmerica</b></p> <p>Relinquished by: <b>John Murphy</b> Date: <b>2-15-19</b> Time: <b>1550</b> Received by: <b>John Murphy</b> Date/Time: <b>2-16-19 1025</b> Company: <b>TestAmerica</b></p>																																								
<p>Custody Seals intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Cooler Temperature(s) °C and Other Remarks: <b>2.2, 2.4, 1.6</b></p>																																								

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**TestAmerica Nashville**

2960 Foster Creighton Drive  
Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404

**Chain of Custody Record**

**Midland #264**

<b>Client Information</b>		Sampler: <b>Deli Moore</b>	Lab P/M: <b>Gambill, Jennifer</b>	Carrier Tracking No.: <b>490-96301-26265-6</b>																																			
Client Contact: <b>Debi Sport Moore</b>	Phone: <b>(432) 683-1100</b>	E-Mail: <b>jennifer.gambill@testamericainc.com</b>	Page: <b>6 of 15</b>	Job #: <b>31</b>																																			
<b>Analysis Requested</b>																																							
<p><b>Due Date Requested:</b> TAT Requested (days):</p> <p><b>PO#:</b> Purchase Order not required <b>WO#:</b></p> <p><b>Email:</b> debi@sportenv.com</p> <p><b>Project Name:</b> <b>X70-Denver River Queen</b></p> <p><b>Session#:</b></p>																																							
<p><b>Field Filtered Sample (Yes or No):</b> <b>Yes</b></p> <p><b>Site:</b></p> <p><b>Address:</b> 502 N Big Spring St</p> <p><b>City:</b> Midland</p> <p><b>State, Zip:</b> TX, 79701</p> <p><b>Phone:</b> 432-683-1100(Tel)</p> <p><b>Email:</b> debi@sportenv.com</p> <p><b>Project Name:</b> <b>X70-Denver River Queen</b></p> <p><b>Site:</b></p>																																							
<p><b>Sample Identification</b></p> <table border="1"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste oil, B=tissue, A=air)</th> <th>Preservation Code:</th> </tr> </thead> <tbody> <tr> <td>2-14-19</td> <td>1318</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> <tr> <td>2-14-19</td> <td>1318</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> <tr> <td>2-14-19</td> <td>1318</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> <tr> <td>2-14-19</td> <td>1433</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> <tr> <td>2-14-19</td> <td>1433</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> <tr> <td>2-14-19</td> <td>1448</td> <td>G</td> <td>Solid</td> <td>X</td> </tr> </tbody> </table>					Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste oil, B=tissue, A=air)	Preservation Code:	2-14-19	1318	G	Solid	X	2-14-19	1318	G	Solid	X	2-14-19	1318	G	Solid	X	2-14-19	1433	G	Solid	X	2-14-19	1433	G	Solid	X	2-14-19	1448	G	Solid	X
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<p><b>Special Instructions/Note:</b></p> <p><b>alterable</b></p> <p><b>0015B-DRO, 8015B-GRO, 8260B</b></p>																																							
<p><b>Total Number of Contractors:</b> <b>1</b></p>																																							
<p><b>Preservation Codes:</b></p> <table border="1"> <tr> <td>A - HCl</td> <td>M - Hexane</td> </tr> <tr> <td>B - NaOH</td> <td>N - None</td> </tr> <tr> <td>C - Zn Acetate</td> <td>O - AsNaO2</td> </tr> <tr> <td>D - Nitric Acid</td> <td>P - Na2OAs</td> </tr> <tr> <td>E - NaHSO4</td> <td>Q - Na2SCo3</td> </tr> <tr> <td>F - MeOH</td> <td>R - Na2SO4</td> </tr> <tr> <td>G - Amchlor</td> <td>S - H2SO4</td> </tr> <tr> <td>H - Ascorbic Acid</td> <td>T - TSP Dodechydrate</td> </tr> <tr> <td>I - Ice</td> <td>U - Acetone</td> </tr> <tr> <td>J - DI Water</td> <td>V - MCAA</td> </tr> <tr> <td>K - EDTA</td> <td>W - pH 4-5</td> </tr> <tr> <td>L - EDA</td> <td>Z - other (specify)</td> </tr> <tr> <td colspan="2">Other:</td> </tr> </table>					A - HCl	M - Hexane	B - NaOH	N - None	C - Zn Acetate	O - AsNaO2	D - Nitric Acid	P - Na2OAs	E - NaHSO4	Q - Na2SCo3	F - MeOH	R - Na2SO4	G - Amchlor	S - H2SO4	H - Ascorbic Acid	T - TSP Dodechydrate	I - Ice	U - Acetone	J - DI Water	V - MCAA	K - EDTA	W - pH 4-5	L - EDA	Z - other (specify)	Other:										
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<p><b>Method of Shipment:</b></p> <p><b>32</b></p> <p><b>33</b></p> <p><b>34</b></p> <p><b>35</b></p> <p><b>36</b></p> <p><b>37</b></p> <p><b>38</b></p> <p><b>39</b></p> <p><b>40</b></p> <p><b>41</b></p> <p><b>42</b></p> <p><b>43</b></p> <p><b>44</b></p> <p><b>45</b></p> <p><b>46</b></p> <p><b>47</b></p> <p><b>48</b></p> <p><b>49</b></p> <p><b>50</b></p> <p><b>51</b></p> <p><b>52</b></p> <p><b>53</b></p> <p><b>54</b></p> <p><b>55</b></p> <p><b>56</b></p> <p><b>57</b></p> <p><b>58</b></p> <p><b>59</b></p> <p><b>60</b></p> <p><b>61</b></p> <p><b>62</b></p> <p><b>63</b></p> <p><b>64</b></p> <p><b>65</b></p> <p><b>66</b></p> <p><b>67</b></p> <p><b>68</b></p> <p><b>69</b></p> <p><b>70</b></p> <p><b>71</b></p> <p><b>72</b></p> <p><b>73</b></p> <p><b>74</b></p> <p><b>75</b></p> <p><b>76</b></p> <p><b>77</b></p> <p><b>78</b></p> <p><b>79</b></p> <p><b>80</b></p> <p><b>81</b></p> <p><b>82</b></p> <p><b>83</b></p> <p><b>84</b></p> <p><b>85</b></p> <p><b>86</b></p> <p><b>87</b></p> 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<p><b>419</b></p> <p><b>420</b></p> <p><b>421</b></p> <p><b>422</b></p> <p><b>423</b></p> <p><b>424</b></p> <p><b>425</b></p> <p><b>426</b></p> <p><b>427</b></p> <p><b>428</b></p> <p><b>429</b></p> <p><b>430</b></p> <p><b>431</b></p> <p><b>432</b></p> <p><b>433</b></p> <p><b>434</b></p> <p><b>435</b></p> <p><b>436</b></p> <p><b>437</b></p> <p><b>438</b></p> <p><b>439</b></p> <p><b>440</b></p> <p><b>441</b></p> <p><b>442</b></p> <p><b>443</b></p> <p><b>444</b></p> <p><b>445</b></p> <p><b>446</b></p> <p><b>447</b></p> <p><b>448</b></p> <p><b>449</b></p> <p><b>450</b></p> <p><b>451</b></p> <p><b>452</b></p> <p><b>453</b></p> <p><b>454</b></p> <p><b>455</b></p> <p><b>456</b></p> <p><b>457</b></p> <p><b>458</b></p> <p><b>459</b></p> <p><b>460</b></p> <p><b>461</b></p> <p><b>462</b></p> <p><b>463</b></p> <p><b>464</b></p> <p><b>465</b></p> <p><b>466</b></p> <p><b>467</b></p> <p><b>468</b></p> <p><b>469</b></p> <p><b>470</b></p> <p><b>471</b></p> <p><b>472</b></p> <p><b>473</b></p> <p><b>474</b></p> <p><b>475</b></p> <p><b>476</b></p> <p><b>477</b></p> <p><b>478</b></p> <p><b>479</b></p> <p><b>480</b></p> <p><b>481</b></p> <p><b>482</b></p> <p><b>483</b></p> <p><b>484</b></p> <p><b>485</b></p> <p><b>486</b></p> <p><b>487</b></p> <p><b>488</b></p> <p><b>489</b></p> <p><b>490</b></p> <p><b>491</b></p> <p><b>492</b></p> <p><b>493</b></p> <p><b>494</b></p> <p><b>495</b></p> <p><b>496</b></p> <p><b>497</b></p> <p><b>498</b></p> <p><b>499</b></p> <p><b>500</b></p> <p><b>501</b></p> <p><b>502</b></p> <p><b>503</b></p> <p><b>504</b></p> <p><b>505</b></p> <p><b>506</b></p> <p><b>507</b></p> <p><b>508</b></p> <p><b>509</b></p> <p><b>510</b></p> <p><b>511</b></p> <p><b>512</b></p> <p><b>513</b></p> <p><b>514</b></p> <p><b>515</b></p> <p><b>516</b></p> <p><b>517</b></p> <p><b>518</b></p> <p><b>519</b></p> <p><b>520</b></p> <p><b>521</b></p> <p><b>522</b></p> <p><b>523</b></p> <p><b>524</b></p> <p><b>525</b></p> <p><b>526</b></p> <p><b>527</b></p> <p><b>528</b></p> 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<p><b>694</b></p> <p><b>695</b></p> <p><b>696</b></p> <p><b>697</b></p> <p><b>698</b></p> <p><b>699</b></p> <p><b>700</b></p> <p><b>701</b></p> <p><b>702</b></p> <p><b>703</b></p> <p><b>704</b></p> <p><b>705</b></p> <p><b>706</b></p> <p><b>707</b></p> <p><b>708</b></p> <p><b>709</b></p> <p><b>710</b></p> <p><b>711</b></p> <p><b>712</b></p> <p><b>713</b></p> <p><b>714</b></p> <p><b>715</b></p> <p><b>716</b></p> <p><b>717</b></p> <p><b>718</b></p> <p><b>719</b></p> <p><b>720</b></p> <p><b>721</b></p> <p><b>722</b></p> <p><b>723</b></p> <p><b>724</b></p> <p><b>725</b></p> <p><b>726</b></p> <p><b>727</b></p> <p><b>728</b></p> <p><b>729</b></p> <p><b>730</b></p> <p><b>731</b></p> <p><b>732</b></p> <p><b>733</b></p> <p><b>734</b></p> <p><b>735</b></p> <p><b>736</b></p> <p><b>737</b></p> <p><b>738</b></p> <p><b>739</b></p> <p><b>740</b></p> <p><b>741</b></p> <p><b>742</b></p> <p><b>743</b></p> <p><b>744</b></p> <p><b>745</b></p> <p><b>746</b></p> <p><b>747</b></p> <p><b>748</b></p> 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**TestAmerica Nashville**  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404

**Chain of Custody Record**

**Midland #264**

**TestAmerica**  
THE LEADERS IN ENVIRONMENTAL TESTING

**Client Information**

Client Contact:  
Debi Sport Moore

Company:  
Sport Environmental Services LLC

Address:  
502 N Big Spring St.

City:  
Midland

State, Zip:  
TX, 79701

Phone:  
432-653-1100(Tel)

Email:  
debi@sportenv.com

Project Name:  
XTO - Seven Rivers Queen

SSOW#:  
49014499

Sampler: **Deli Moore**  
Phone: **(432) 653-1100**  
E-Mail: **jennifer.gambill@testamericainc.com**

Carrier Tracking No(s):  
**COC No:  
490-96301-26265.9**

Page:  
**Page 9 of 15**

Job #:  
**Job #:**

Preservation Codes:  
**A - HCl  
B - NaOH  
C - Zn Acetate  
D - Nitric Acid  
E - NaHSO4  
F - MeOH  
G - Amchlor  
H - Ascorbic Acid  
I - Ice  
J - Di Water  
K - EDTA  
L - EDA  
M - Hexane  
N - None  
O - AslaO2  
P - Na2O4S  
Q - Na2S2O3  
R - Na2S2O3  
S - H2SO4  
T - TSP Dodecahydrate  
U - Acetone  
V - MCAA  
W - pH 4-5  
Z - other (specify)  
Other:**

Total Number of containers:  
**1**

Special Instructions/Note:  
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Analysis Requested

Due Date Requested:

TAT Requested (days):

Purchase Order not required

WO #:

Project #:

49014499

SSOW#:  
**clloteclle**

8015B\_DRO, 8016B\_GRO, 8260B

Preserved Sample (Yes or No):  
**Yes**

Filtered Sample (Yes or No):  
**No**

Preserved Medium (Yes or No):  
**No**

Special Instructions/Note:  
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Sample Identification

Sample Date

Sample Time

Sample Type

Matrix

(W=water,  
S=solid,  
O=water/oil,  
G=tissue, A=air)

Preservation Code:

N

X

X

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**TestAmerica Nashville**  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTIMONIALS

# Midland #264

## Chain of Custody Record

Client Information		Sampler: Debi Moore		Lab PM: Gambill, Jennifer		Caretaker Tracking No(s): COC No: 490-96301-26265.11	
Client Contact:	Debi Sport Moore	Phone: (432) 683-1100	E-Mail: jennifer.gambill@testamericanainc.com	Page: 11 of 15	Job #:		
<b>Analysis Requested</b>							
<input checked="" type="checkbox"/> Total Number of Contaminants <input type="checkbox"/> Preservation Codes:							
A - HCl      M - Hexane B - NaOH      N - None C - Zn Acetate      O - AsNaO2 D - Nitric Acid      P - Na2O4S E - NaHSO4      Q - Na2SO3 F - MeOH      R - Na2S2O3 G - Amchlor      S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice      U - Acetone J - Di Water      V - MCAA K - EDTA      W - pH 4.5 L - EDA      Z - other (specify) Other: _____							
Total Number of Contaminants <input checked="" type="checkbox"/> Special Instructions/Note:							
8015B - DR0, 8016B - GR0, 8260B Debris							
Used Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Matrix (Water, Solid, Oil, Tissue, etc):							
Project Name: X70 - Seven Rivers Queen <input checked="" type="checkbox"/> Sample Type (C=comp, G=grab):							
SSOW#:							
Sample Identification							
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:	N			
2-14-19	1153	6	Solid	X			
2-14-19	1155	6	Solid	X			
2-14-19	1157	6	Solid	X			
2-14-19	1211	6	Solid	X			
2-14-19	1213	6	Solid	X			
2-14-19	1132	6	Solid	X			
2-14-19	1133	6	Solid	X			
2-14-19	1134	6	Solid	X			
2-14-19	1150	6	Solid	X			
2-14-19	1109	6	Solid	X			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological							
Deliverable Requested: I, II, III, IV, Other (specify)							
Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____							
Relinquished by: Debi S. Moore Date/Time: 2-15-19 1546 Company: ComA Received by: Jennifer Gambill Date/Time: 2-16-19 1025 Company: ComA							
Relinquished by: Debi S. Moore Date/Time: 2-15-19 1550 Company: ComA Received by: Jennifer Gambill Date/Time: 2-16-19 1025 Company: ComA							
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      Custody Seal No.: 2-2, 2-4, 1, 6							
Cooler Temperature(s) °C and Other Remarks: _____							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Special Instructions/QC Requirements: _____							

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**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

# Midland

## #264

### Chain of Custody Record

<b>Client Information</b>		Sampler: <b>Debi Moore</b>	Lab P/M: <b>Gambill, Jennifer</b>	COC No.: <b>490-965-01-265-65-12</b>
Client Contact: Debi Sport Moore	Phone: <b>(432) 633-1100</b>	E-Mail: <b>jennifer.gambill@testamericainc.com</b>	Page: <b>12 of 15</b>	Job #:
<b>Analysis Requested</b>  <b>Preservation Codes:</b> A - HCl      M - Hexane B - NaOH      N - None C - Zn Acetate      O - AsNaO2 D - Nitric Acid      P - Na2O4S E - NaHSO4      Q - Na2SO3 F - MeOH      R - Na2S2O3 G - Ammonium      S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice      U - Acetone J - DI Water      V - MCAA K - EDTA      W - pH 4-5 L - EDA      Z - other (specify) Other: _____				
Total Number of Contaminants: <b>1</b>				
<b>Sample Identification</b>  Sample Date      Sample Time      Sample Type (C=Comp, G=Grab)      Matrix (W=water, S=solid, O=oastation, B=tissue, A=air) Preservation Code: <b>X</b> N      X      X				
SRP-SB-09-001 @ 2 'bgs      2-14-19      1111      G      Solid SRP-SB-09-001 @ 4 'bgs      2-14-19      1115      G      Solid SRP-SB-09-001 @ 8 'bgs      2-14-19      1123      G      Solid SRP-SB-09-001 @ 12 'bgs      2-14-19      1144      G      Solid HDP-SB-01-001 @ 0-1'bgs      /      /      /      Solid HDP-SB-01-001 @ 2 'bgs      /      /      /      Solid HDP-SB-01-001 @ 4 'bgs      /      /      /      Solid HDP-SB-01-001 @ 8 'bgs      /      /      /      Solid HDP-SB-01-001 @ 12 'bgs      /      /      /      Solid HDP-SB-02-001 @ 0-1'bgs      /      /      /      Solid HDP-SB-02-001 @ 2 'bgs      /      /      /      Solid				
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify): <b>NDT</b>				
<b>Empty Kit Relinquished by:</b> Relinquished by: <b>Jean S. Moore</b> Date/Time: <b>2-15-19 1541</b> Company: <b>Spart</b> Received by: <b>Jean S. Moore</b> Date/Time: <b>2-15-19 1550</b> Company: <b>TestAmerica</b> Relinquished by: <b>Jean S. Moore</b> Date/Time: <b>2-15-19 1550</b> Company: <b>Spart</b> Received by: <b>Jean S. Moore</b> Date/Time: <b>2-16-19 1025</b> Company: <b>TestAmerica</b>				
<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
<b>Special Instructions/QC Requirements:</b> Method of Shipment: _____ Cooler Temperature(s) °C and Other Remarks: <b>2.2, 7.4, 1.6</b>				



## **Chain of Custody Record**

Phone (615) 726-0177 Fax (615) 726-3404

Ver: 08/04/2016

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**TestAmerica Nashville**  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Phone (615) 726-0177 Fax (615) 726-3404

**Chain of Custody Record**

**Midland** #264

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <b>Debi Moore</b>	Lab PW: <b>Gambill, Jennifer</b>	COC No.: <b>490-96301-26635.15</b>																																																												
Client Contact:	Debi Sport Moore	Phone: <b>(432) 693-1100</b>	E-Mail: <b>jennifer.gambill@testamentcainc.com</b>	Page: <b>15 of 15</b>																																																												
Company:	Sport Environmental Services LLC	Job #: <b>168662-#15-B</b>																																																														
Address:	502 N Big Spring St	Due Date Requested:																																																														
City:	Midland	TAT Requested (days):																																																														
State, Zip:	TX, 79701																																																															
Phone:	432-683-1100 (Tel)	PO #:	Purchase Order not required																																																													
Email:	debi@shortenv.com	WO #:																																																														
Project Name:	<b>XTO - Seven Rivers Green</b>	Project #:	49014499																																																													
Site:	SSOW#:																																																															
<b>Analysis Requested</b>																																																																
<input checked="" type="checkbox"/> Total Number of Contaminants <input checked="" type="checkbox"/> Total Filled Sample (Yes or No) <input checked="" type="checkbox"/> Premium MSNDP (Yes or No) <input checked="" type="checkbox"/> B016B-DRO, B016B-GRO, B260B																																																																
Special Instructions/Note:  <b>Chloride</b>																																																																
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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: 490-169020-1

Client Project/Site: XTO Seven Rivers Queen

For:

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

Attn: Debi Sport Moore

Authorized for release by:

3/1/2019 2:34:05 PM

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

jennifer.gambill@testamericainc.com

### LINKS

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results through

Total Access

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The  
Expert

Visit us at:

[www.testamericainc.com](http://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.

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## Sample Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-169020-1	HDP-SB-01-001 @ 0-1'bgs	Solid	02/20/19 07:30	02/23/19 09:10
490-169020-2	HDP-SB-01-001 @ 2'bgs	Solid	02/20/19 07:30	02/23/19 09:10
490-169020-3	HDP-SB-02-001 @ 0-1'bgs	Solid	02/20/19 07:51	02/23/19 09:10
490-169020-4	HDP-SB-02-001 @ 2'bgs	Solid	02/20/19 07:57	02/23/19 09:10
490-169020-5	HDP-SB-03-001 @ 0-1'bgs	Solid	02/20/19 08:12	02/23/19 09:10
490-169020-6	HDP-SB-03-001 @ 1.5'bgs	Solid	02/20/19 08:19	02/23/19 09:10
490-169020-7	HDP-SB-04-001 @ 0-1'bgs	Solid	02/20/19 08:29	02/23/19 09:10
490-169020-8	HDP-SB-04-001 @ 2'bgs	Solid	02/20/19 08:36	02/23/19 09:10
490-169020-9	HDP-SB-04-001 @ 3'bgs	Solid	02/20/19 08:42	02/23/19 09:10
490-169020-10	HDP-SB-05-001 @ 0-1'bgs	Solid	02/20/19 09:04	02/23/19 09:10
490-169020-11	HDP-SB-05-001 @ 2'bgs	Solid	02/20/19 09:04	02/23/19 09:10

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TestAmerica Nashville

## Case Narrative

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

### Job ID: 490-169020-1

Laboratory: TestAmerica Nashville

#### Narrative

Job Narrative  
490-169020-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/23/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5° C.

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## Definitions/Glossary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

### 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)

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-01-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-1**

Matrix: Solid

Date Collected: 02/20/19 07:30  
Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.86	6.90	mg/Kg			02/28/19 05:13	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-01-001 @ 2'bgs**

**Lab Sample ID: 490-169020-2**

Matrix: Solid

Date Collected: 02/20/19 07:30  
Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.83	6.88	mg/Kg			02/28/19 06:03	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-02-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-3**

Matrix: Solid

Date Collected: 02/20/19 07:51

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.1	7.04	mg/Kg			02/28/19 06:19	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-02-001 @ 2'bgs**

**Lab Sample ID: 490-169020-4**

Matrix: Solid

Date Collected: 02/20/19 07:57

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.96	6.97	mg/Kg			02/28/19 06:36	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-03-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-5**

Matrix: Solid

Date Collected: 02/20/19 08:12

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.94	6.96	mg/Kg			02/28/19 06:52	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-03-001 @ 1.5'bgs**

**Lab Sample ID: 490-169020-6**

Matrix: Solid

Date Collected: 02/20/19 08:19

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.98	6.99	mg/Kg			02/28/19 07:09	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-04-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-7**

Matrix: Solid

Date Collected: 02/20/19 08:29

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.89	6.93	mg/Kg			02/28/19 07:25	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-04-001 @ 2'bgs**

**Lab Sample ID: 490-169020-8**

Matrix: Solid

Date Collected: 02/20/19 08:36

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.98	6.98	mg/Kg			02/28/19 07:42	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-04-001 @ 3'bgs**

**Lab Sample ID: 490-169020-9**

Matrix: Solid

Date Collected: 02/20/19 08:42

Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.87	6.91	mg/Kg			02/28/19 07:59	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-05-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-10**

Matrix: Solid

Date Collected: 02/20/19 09:04  
Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		9.90	6.93	mg/Kg			02/28/19 08:15	1

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TestAmerica Nashville

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-05-001 @ 2'bgs**

**Lab Sample ID: 490-169020-11**

Matrix: Solid

Date Collected: 02/20/19 09:04  
Date Received: 02/23/19 09:10

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.02	mg/Kg			02/28/19 09:05	1

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TestAmerica Nashville

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 490-577196/1-A**

**Matrix: Solid**

**Analysis Batch: 577832**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	ND		9.96	6.97	mg/Kg			02/28/19 04:23	1

**Lab Sample ID: LCS 490-577196/2-A**

**Matrix: Solid**

**Analysis Batch: 577832**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Chloride	100	93.60		mg/Kg		93	90 - 110		

**Lab Sample ID: LCSD 490-577196/3-A**

**Matrix: Solid**

**Analysis Batch: 577832**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Chloride	99.7	93.99		mg/Kg		94	90 - 110	0	20

**Lab Sample ID: 490-169020-1 MS**

**Matrix: Solid**

**Analysis Batch: 577832**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloride	ND		99.4	97.10		mg/Kg		98	80 - 120

**Lab Sample ID: 490-169020-1 MSD**

**Matrix: Solid**

**Analysis Batch: 577832**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloride	ND		99.8	96.97		mg/Kg		97	80 - 120

TestAmerica Nashville

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

## HPLC/IC

### Leach Batch: 577196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169020-1	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	DI Leach	5
490-169020-2	HDP-SB-01-001 @ 2'bgs	Soluble	Solid	DI Leach	6
490-169020-3	HDP-SB-02-001 @ 0-1'bgs	Soluble	Solid	DI Leach	7
490-169020-4	HDP-SB-02-001 @ 2'bgs	Soluble	Solid	DI Leach	8
490-169020-5	HDP-SB-03-001 @ 0-1'bgs	Soluble	Solid	DI Leach	9
490-169020-6	HDP-SB-03-001 @ 1.5'bgs	Soluble	Solid	DI Leach	10
490-169020-7	HDP-SB-04-001 @ 0-1'bgs	Soluble	Solid	DI Leach	11
490-169020-8	HDP-SB-04-001 @ 2'bgs	Soluble	Solid	DI Leach	12
490-169020-9	HDP-SB-04-001 @ 3'bgs	Soluble	Solid	DI Leach	
490-169020-10	HDP-SB-05-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-169020-11	HDP-SB-05-001 @ 2'bgs	Soluble	Solid	DI Leach	
MB 490-577196/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-577196/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-577196/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-169020-1 MS	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-169020-1 MSD	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	DI Leach	

### Analysis Batch: 577832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169020-1	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-2	HDP-SB-01-001 @ 2'bgs	Soluble	Solid	300.0	577196
490-169020-3	HDP-SB-02-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-4	HDP-SB-02-001 @ 2'bgs	Soluble	Solid	300.0	577196
490-169020-5	HDP-SB-03-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-6	HDP-SB-03-001 @ 1.5'bgs	Soluble	Solid	300.0	577196
490-169020-7	HDP-SB-04-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-8	HDP-SB-04-001 @ 2'bgs	Soluble	Solid	300.0	577196
490-169020-9	HDP-SB-04-001 @ 3'bgs	Soluble	Solid	300.0	577196
490-169020-10	HDP-SB-05-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-11	HDP-SB-05-001 @ 2'bgs	Soluble	Solid	300.0	577196
MB 490-577196/1-A	Method Blank	Soluble	Solid	300.0	577196
LCS 490-577196/2-A	Lab Control Sample	Soluble	Solid	300.0	577196
LCSD 490-577196/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	577196
490-169020-1 MS	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	300.0	577196
490-169020-1 MSD	HDP-SB-01-001 @ 0-1'bgs	Soluble	Solid	300.0	577196

## Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-01-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-1**

Matrix: Solid

Date Collected: 02/20/19 07:30

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0429 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 05:13	JHS	TAL NSH

**Client Sample ID: HDP-SB-01-001 @ 2'bgs**

**Lab Sample ID: 490-169020-2**

Matrix: Solid

Date Collected: 02/20/19 07:30

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0506 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 06:03	JHS	TAL NSH

**Client Sample ID: HDP-SB-02-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-3**

Matrix: Solid

Date Collected: 02/20/19 07:51

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9813 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 06:19	JHS	TAL NSH

**Client Sample ID: HDP-SB-02-001 @ 2'bgs**

**Lab Sample ID: 490-169020-4**

Matrix: Solid

Date Collected: 02/20/19 07:57

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0112 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 06:36	JHS	TAL NSH

**Client Sample ID: HDP-SB-03-001 @ 0-1'bgs**

**Lab Sample ID: 490-169020-5**

Matrix: Solid

Date Collected: 02/20/19 08:12

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0193 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 06:52	JHS	TAL NSH

**Client Sample ID: HDP-SB-03-001 @ 1.5'bgs**

**Lab Sample ID: 490-169020-6**

Matrix: Solid

Date Collected: 02/20/19 08:19

Date Received: 02/23/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0058 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 07:09	JHS	TAL NSH

TestAmerica Nashville

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

**Client Sample ID: HDP-SB-04-001 @ 0-1'bgs**

Date Collected: 02/20/19 08:29

Date Received: 02/23/19 09:10

**Lab Sample ID: 490-169020-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0321 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 07:25	JHS	TAL NSH

**Client Sample ID: HDP-SB-04-001 @ 2'bgs**

Date Collected: 02/20/19 08:36

Date Received: 02/23/19 09:10

**Lab Sample ID: 490-169020-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0069 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 07:42	JHS	TAL NSH

**Client Sample ID: HDP-SB-04-001 @ 3'bgs**

Date Collected: 02/20/19 08:42

Date Received: 02/23/19 09:10

**Lab Sample ID: 490-169020-9**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0404 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 07:59	JHS	TAL NSH

**Client Sample ID: HDP-SB-05-001 @ 0-1'bgs**

Date Collected: 02/20/19 09:04

Date Received: 02/23/19 09:10

**Lab Sample ID: 490-169020-10**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0299 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 08:15	JHS	TAL NSH

**Client Sample ID: HDP-SB-05-001 @ 2'bgs**

Date Collected: 02/20/19 09:04

Date Received: 02/23/19 09:10

**Lab Sample ID: 490-169020-11**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.9914 g	30 mL	577196	02/27/19 10:35	JHS	TAL NSH
Soluble	Analysis	300.0		1			577832	02/28/19 09:05	JHS	TAL NSH

## Laboratory References:

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

TestAmerica Nashville

## Method Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	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.

**Laboratory References:**

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

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## Accreditation/Certification Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169020-1

### 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		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	06-30-19
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 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
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	12-31-19
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	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
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	12-30-19
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	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

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

TestAmerica Nashville



## COOLER RECEIPT FORM

Cooler Received/Opened On 2/23/2019 @ 0910Time Samples Removed From Cooler 1558 Time Samples Placed In Storage 1607 (2 Hour Window)1. Tracking # 7295 (last 4 digits, FedEx) Courier: FedExIR Gun ID 17960358 pH Strip Lot NA Chlorine Strip Lot NA2. Temperature of rep. sample or temp blank when opened: 9.8 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES  NO  NA4. Were custody seals on outside of cooler? YES  NO...NAIf yes, how many and where: 1 front5. Were the seals intact, signed, and dated correctly? YES  NO...NA6. Were custody papers inside cooler? YES  NO...NAI certify that I opened the cooler and answered questions 1-6 (initial) JH7. Were custody seals on containers: YES  NO  and Intact YES...NO...NAWere these signed and dated correctly? YES  NO...NA8. Packing mat'l used? Bubblewrap  Plastic bag  Peanuts  Vermiculite  Foam Insert  Paper  Other None9. Cooling process: Ice  Ice-pack  Ice (direct contact)  Dry ice  Other None10. Did all containers arrive in good condition (unbroken)? YES  NO...NA11. Were all container labels complete (#, date, signed, pres., etc.)? YES  NO...NA12. Did all container labels and tags agree with custody papers? YES  NO...NA13a. Were VOA vials received? YES  NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES  NO...NA If multiple coolers, sequence # 6H

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES  NO...NAb. Did the bottle labels indicate that the correct preservatives were used YES  NO...NA16. Was residual chlorine present? YES  NO...NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) 6H17. Were custody papers properly filled out (ink, signed, etc.)? YES  NO...NA18. Did you sign the custody papers in the appropriate place? YES  NO...NA19. Were correct containers used for the analysis requested? YES  NO...NA20. Was sufficient amount of sample sent in each container? YES  NO...NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) 6HI certify that I attached a label with the unique LIMS number to each container (initial) 6H21. Were there Non-Conformance issues at login? YES  NO Was a NCM generated? YES  NO...# \_\_\_\_\_



# TestAmerica

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: 490-169143-1

TestAmerica SDG: XTO Seven Rivers Queen: NRP-SB-14

Client Project/Site: XTO Seven Rivers Queen

For:

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

Attn: Debi Sport Moore

Jennifer Gambill

Authorized for release by:

3/6/2019 4:52:07 PM

Jennifer Gambill, Project Manager I  
(615)301-5044  
[jennifer.gambill@testamericainc.com](mailto:jennifer.gambill@testamericainc.com)

### LINKS

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[www.testamericainc.com](http://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.

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## Sample Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-169143-1	NRP-SB-14-001 @ 0-1'bgs	Solid	02/14/19 15:31	02/27/19 10:10

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TestAmerica Nashville

## Case Narrative

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

### Job ID: 490-169143-1

Laboratory: TestAmerica Nashville

#### Narrative

##### Job Narrative 490-169143-1

#### Comments

No additional comments.

#### Receipt

The sample was received on 2/27/2019 10:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3° C.

#### HPLC/IC

Method(s) 9056A: The matrix spike duplicate (MSD) recoveries for preparation batch 490-578868 and analytical batch 490-578902 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 9056A: The method blank for analytical batch 490-578902 contained Chloride above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and 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.

# Definitions/Glossary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

## 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)

# Client Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

**Client Sample ID: NRP-SB-14-001 @ 0-1'bgs**

**Lab Sample ID: 490-169143-1**

Matrix: Solid

Date Collected: 02/14/19 15:31

Date Received: 02/27/19 10:10

## Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	176	F1	11.7	8.18	mg/Kg	☀		03/05/19 17:10	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.6		0.1	0.1	%			02/28/19 11:27	1
Percent Solids	85.4		0.1	0.1	%			02/28/19 11:27	1

# QC Sample Results

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID:** MB 490-578868/1-A

**Matrix:** Solid

**Analysis Batch:** 578902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10.0	7.03	mg/Kg			03/05/19 16:25	1

**Lab Sample ID:** LCS 490-578868/2-A

**Matrix:** Solid

**Analysis Batch:** 578902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	100	100.4		mg/Kg		100	80 - 120

**Lab Sample ID:** LCSD 490-578868/3-A

**Matrix:** Solid

**Analysis Batch:** 578902

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
Chloride	101	100.4		mg/Kg		100	80 - 120	0 20

**Lab Sample ID:** 490-169143-1 MS

**Matrix:** Solid

**Analysis Batch:** 578902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Chloride	176	F1	117	299.0		mg/Kg	⊗	105	80 - 120

**Lab Sample ID:** 490-169143-1 MSD

**Matrix:** Solid

**Analysis Batch:** 578902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit
Chloride	176	F1	117	265.7	F1	mg/Kg	⊗	77	80 - 120	12 20

## Method: Moisture - Percent Moisture

**Lab Sample ID:** 490-169206-F-1 DU

**Matrix:** Solid

**Analysis Batch:** 578034

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	11.8		11.6		%		1	20
Percent Solids	88.2		88.4		%		0.2	20

# QC Association Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

## HPLC/IC

### Leach Batch: 578868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169143-1	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
MB 490-578868/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 490-578868/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 490-578868/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
490-169143-1 MS	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	DI Leach	
490-169143-1 MSD	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	DI Leach	

### Analysis Batch: 578902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169143-1	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	9056A	578868
MB 490-578868/1-A	Method Blank	Soluble	Solid	9056A	578868
LCS 490-578868/2-A	Lab Control Sample	Soluble	Solid	9056A	578868
LCSD 490-578868/3-A	Lab Control Sample Dup	Soluble	Solid	9056A	578868
490-169143-1 MS	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	9056A	578868
490-169143-1 MSD	NRP-SB-14-001 @ 0-1'bgs	Soluble	Solid	9056A	578868

## General Chemistry

### Analysis Batch: 578034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169143-1	NRP-SB-14-001 @ 0-1'bgs	Total/NA	Solid	Moisture	
490-169206-F-1 DU	Duplicate	Total/NA	Solid	Moisture	

# Lab Chronicle

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

**Client Sample ID: NRP-SB-14-001 @ 0-1'bgs**

**Lab Sample ID: 490-169143-1**

**Matrix: Solid**

**Date Collected: 02/14/19 15:31**

**Date Received: 02/27/19 10:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			3.0059 g	30 mL	578868	03/05/19 14:43	SOO	TAL NSH
Soluble	Analysis	9056A		1			578902	03/05/19 17:10	SW1	TAL NSH
Total/NA	Analysis	Moisture		1			578034	02/28/19 11:27	BAA	TAL NSH

**Laboratory References:**

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

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TestAmerica Nashville

## Method Summary

Client: Sport Environmental Services LLC  
Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
SDG: XTO Seven Rivers Queen: NRP-SB-14

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL NSH

### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

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# Accreditation/Certification Summary

Client: Sport Environmental Services LLC  
 Project/Site: XTO Seven Rivers Queen

TestAmerica Job ID: 490-169143-1  
 SDG: XTO Seven Rivers Queen: NRP-SB-14

## 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		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	06-30-19
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 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
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	12-31-19
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	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
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	12-30-19
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	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

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

TestAmerica Nashville



490-169143 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 2/27/2019 @ 10:10Time Samples Removed From Cooler 12:49 Time Samples Placed In Storage 12:51 (2 Hour Window)1. Tracking # 0032 (last 4 digits, FedEx) Courier: FedexIR Gun ID 31470366 pH Strip Lot M Chlorine Strip Lot M2. Temperature of rep. sample or temp blank when opened: 1.3 Degrees Celsius3. 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?

If yes, how many and where: 1 front YES  NO  NA5. Were the seals intact, signed, and dated correctly? YES  NO  NA

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) ACE7. Were custody seals on containers: YES  NO  and Intact YES...NO...NAWere these signed and dated correctly? YES  NO  NA8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES  NO  NA11. Were all container labels complete (#, date, signed, pres., etc)? YES  NO  NA12. Did all container labels and tags agree with custody papers? YES  NO  NA13a. Were VOA vials received? YES  NO  NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES  NO  NA If multiple coolers, sequence # \_\_\_\_\_I certify that I unloaded the cooler and answered questions 7-14 (initial) ACE

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES  NO  NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ACE17. Were custody papers properly filled out (ink, signed, etc)? YES  NO  NA18. Did you sign the custody papers in the appropriate place? YES  NO  NA19. Were correct containers used for the analysis requested? YES  NO  NA20. Was sufficient amount of sample sent in each container? YES  NO  NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) ACEI certify that I attached a label with the unique LIMS number to each container (initial) ACE21. Were there Non-Conformance issues at login? YES  NO Was a NCM generated? YES  NO # \_\_\_\_\_



**Attachment H**  
**Boring & Excavation Logs**



## BORING AND WELL LOG LEGEND

LITHOLOGY	WATER LEVEL	WELL/BORING COMPLETION	Sample Type	DESCRIPTION
 ASPHALT CONCRETE BEDROCK IGNEOUS Rock METAMORPHIC Rock SEDIMENTARY Rock Well-graded GRAVEL (GW) Poorly graded GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) Well-graded GRAVEL with silt (GW-GM) Poorly graded GRAVEL with silt (GP-GM) Well-graded GRAVEL with clay (GW-GC) Poorly graded GRAVEL with clay (GP-GC) Well-graded SAND (SW) Poorly graded SAND (SP) Silty SAND (SM) Clayey SAND (SC) Well-graded SAND with silt (SW-SM) Poorly graded SAND with silt (SP-SM) Well-graded SAND with clay (SW-SC) Poorly graded SAND with clay (SP-SC) SILT (ML) Lean CLAY (CL) Organic SOIL (OL) Elastic SILT (MH) Fat CLAY (CH) Organic SOIL (OH) Organic SOIL (OL/OH) PEAT (PT) Volume Descriptors: Trace = <5% Few = 5-10% Little = 15-25% Some = 30-45% Mostly = >=50% Water Level During Drilling Water Level at End of Drilling/in Completed Well Cap Riser Screen End Plug Annular Seal (Bentonite-Cement Grout, Bentonite Slurry/Chips/Pellets/Powder, Other) Sanitary Seal (Bentonite Slurry/Chips/Pellets/Powder, Other) Filter Pack (Sand, Gravel, Other) Backfill Grab Encore Split Spoon Shelby Tube Core Barrel Direct Push Lab Sample and ID				

NOTES:



**Client:** XTO Energy, Inc.  
**Project:** Seven Rivers Queen (1R-5218)  
**Address:** 502 N. Big Spring St., Midland, TX

**BORING LOG**  
**Boring No.** NRP-BG-001  
**Page:** 1 of 1

Drilling Start Date: 02/14/2019 09:20

Drilling End Date: 02/14/2019 09:27

Drilling Company: Sport Environmental Services, LLC

Drilling Method: Direct Push

Drilling Equipment: Geoprobe 540UD

Driller: Clint Elliott

Logged By: Cianna Logie

Boring Depth (ft): 4.0

Boring Diameter (in): 2.00

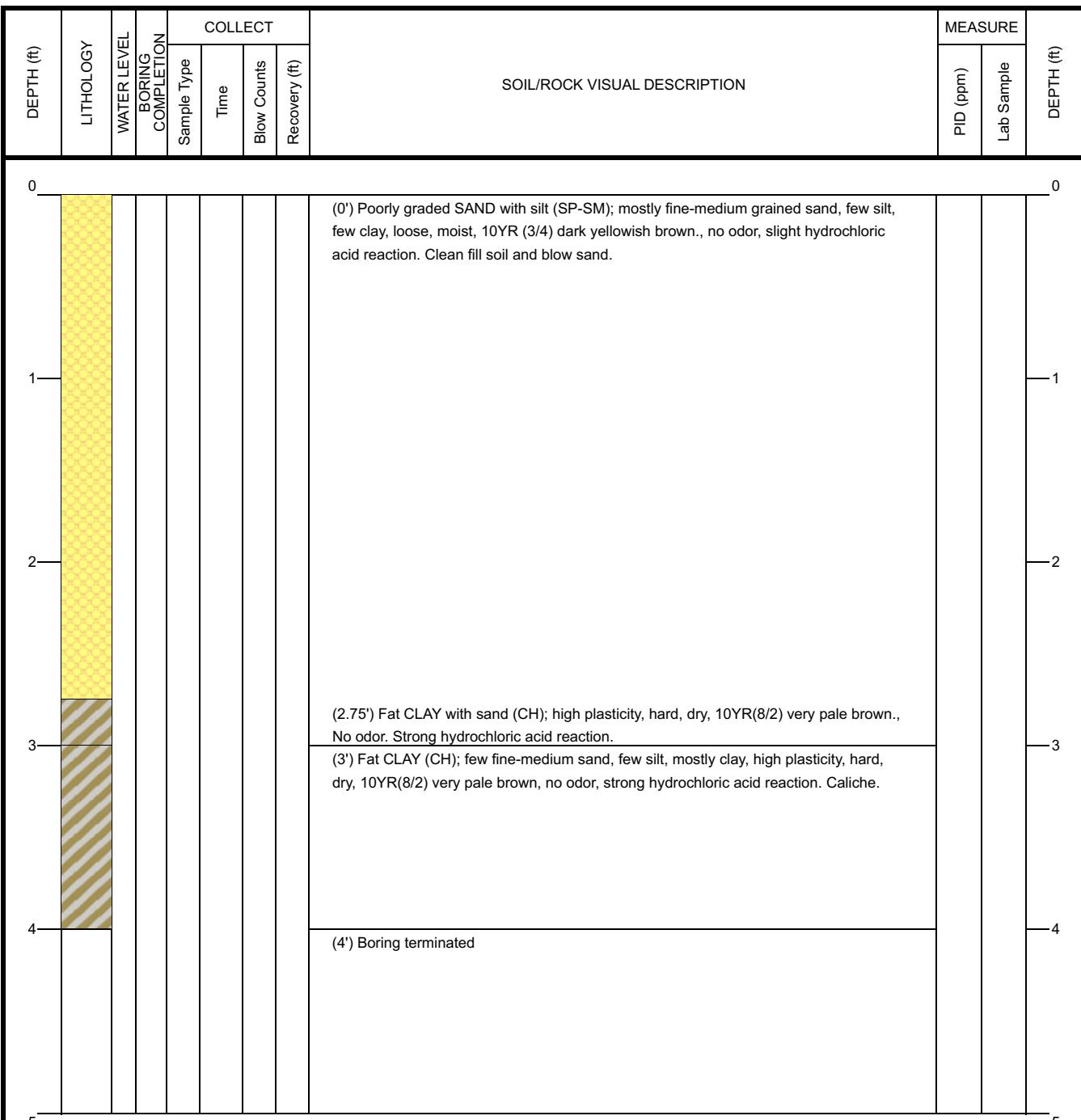
Sampling Method(s):

DTW During Drilling (ft): N/A

DTW After Drilling (ft): N/A

Ground Surface Elev. (ft): 3,605.00

Location (Lat, Long): 32.41884, -103.27051



NOTES: Additional pipe was added to the excavation at 0931 to advance the borehole. However, the borehole was ultimately terminated at 4 feet below ground surface ('bgs) due to auger refusal. This area is immediately north of a pit that was previously used for mining caliche.

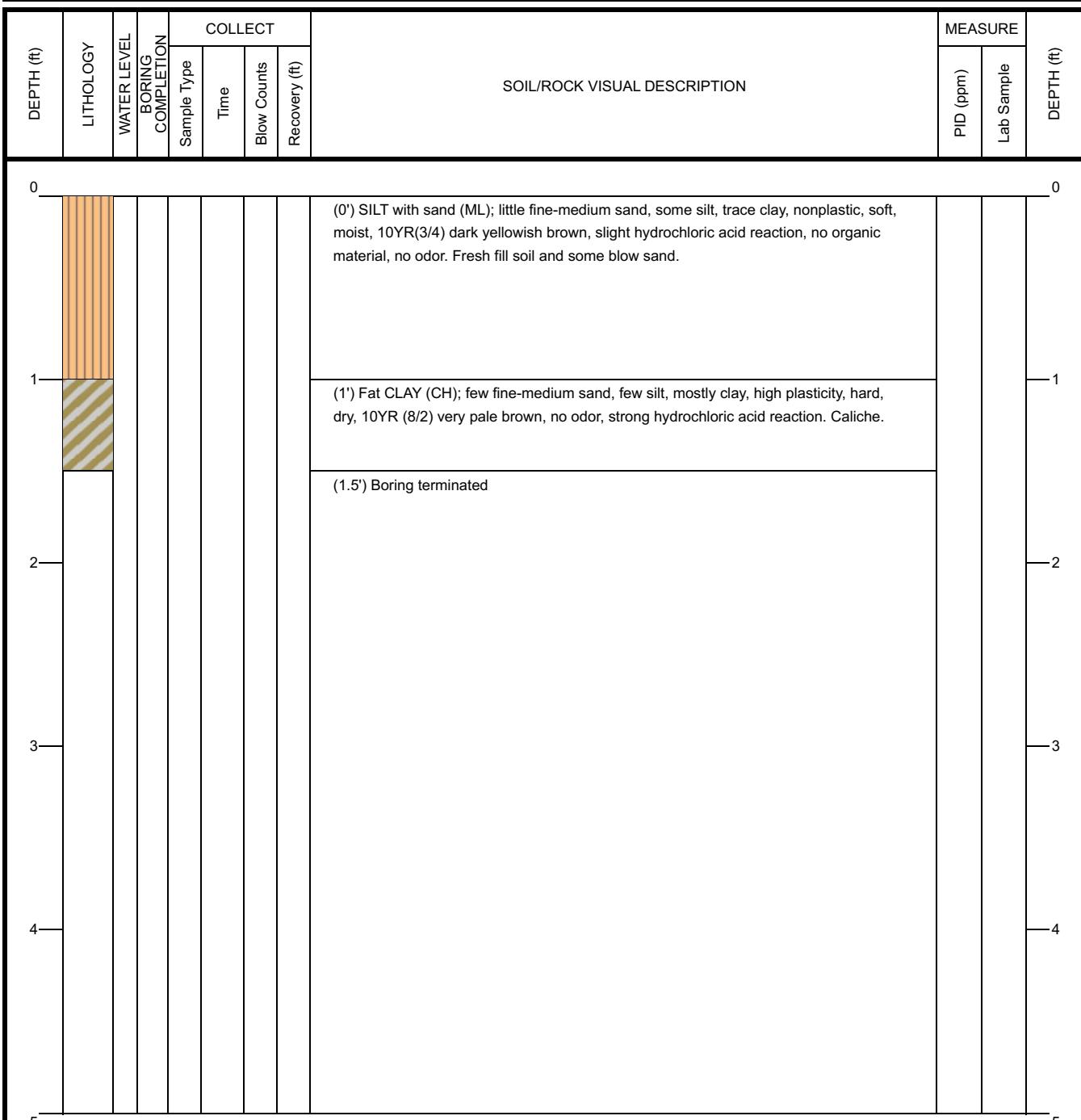


**Client:** XTO Energy, Inc.  
**Project:** Seven Rivers Queen (1R-5218)  
**Address:** 502 N. Big Spring St., Midland, TX

**BORING LOG**  
**Boring No.** NRP-SB-01-001  
**Page:** 1 of 1

Drilling Start Date: 02/14/2019 10:15  
Drilling End Date: 02/14/2019 10:21  
Drilling Company: Sport Environmental  
Drilling Method: Hollow Stem Auger  
Drilling Equipment: Hand Auger  
Driller: Clint Elliott  
Logged By: Cianna Logie

Boring Depth (ft): 1.5  
Boring Diameter (in): 4.00  
Sampling Method(s):  
DTW During Drilling (ft): N/A  
DTW After Drilling (ft): N/A  
Ground Surface Elev. (ft): 3,588.00  
Location (Lat, Long): 32.418677, -103.270721



NOTES: Hand auger was utilized due to the presence of buried pipes near the road right of way. Fresh fill soil was present at this location and some blow sand was present in the top two inches of soil. Site is north of a pit which was previously utilized for caliche mining. Caliche is present at this location and similar locations along the east/west sampling locations at depths from 1'bgs to 4'bgs.

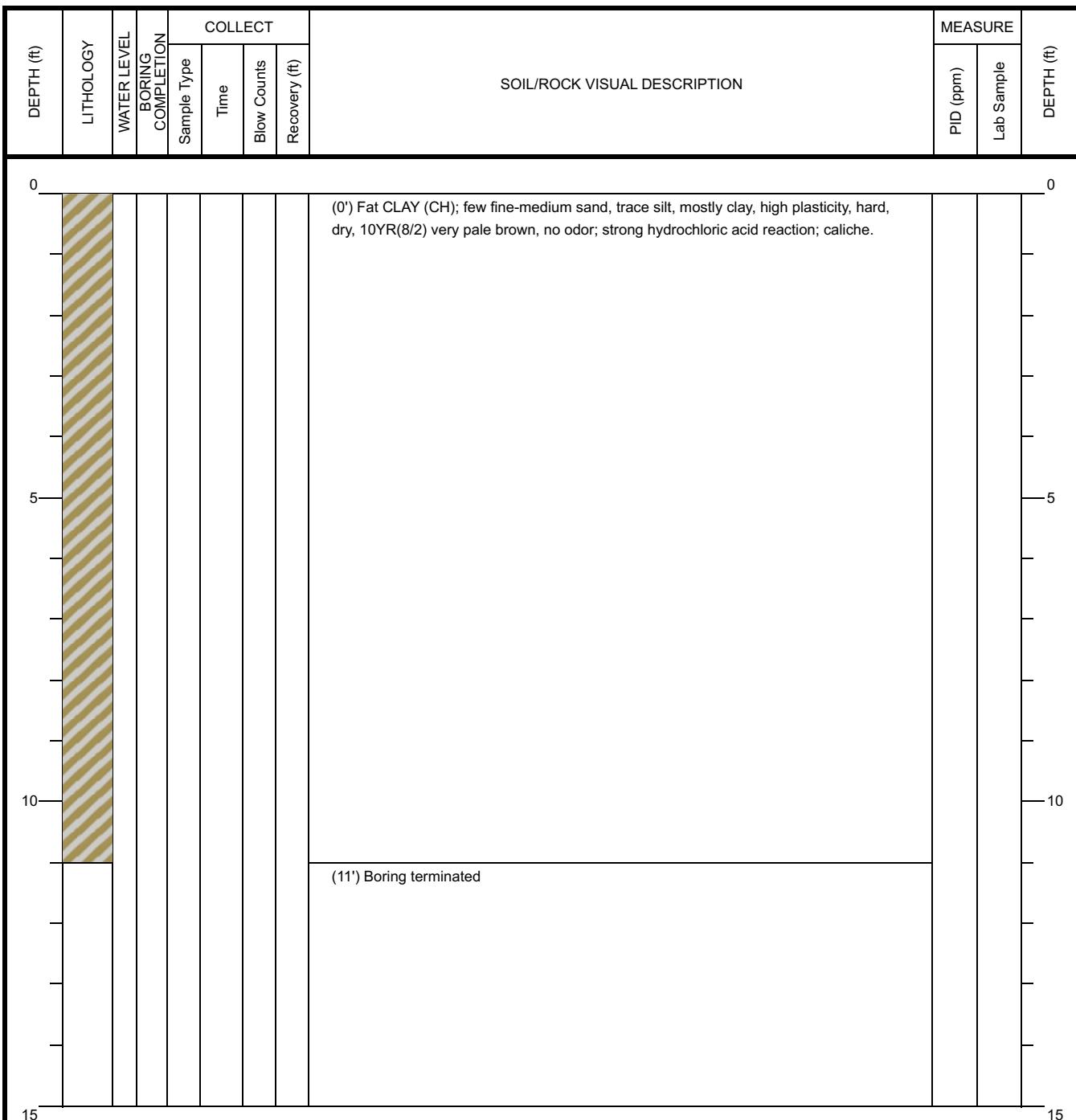


**Client:** XTO Energy, Inc.  
**Project:** Seven Rivers Queen (1R-5218)  
**Address:** 502 N. Big Spring St., Midland, TX

**BORING LOG**  
**Boring No.** SRP-SB-04-001  
**Page:** 1 of 1

Drilling Start Date: 02/14/2019 13:44  
Drilling End Date: 02/14/2019 14:00  
Drilling Company: PMI  
Drilling Method: Other  
Drilling Equipment: Excavator with rock teeth  
Driller: Dean Smyers  
Logged By: Cianna Logie

Boring Depth (ft): 11.0  
Boring Diameter (in): 0  
Sampling Method(s):  
DTW During Drilling (ft): N/A  
DTW After Drilling (ft): N/A  
Ground Surface Elev. (ft): 3,580.00  
Location (Lat, Long): 32.41825, -103.27033



NOTES: Location is in a pit that was previously utilized for mining caliche. Some blow sand was also present in the excavated area; however, this site still consists primarily of caliche.

**Attachment I**  
**Photographic Log with Geotagged Photos**

Photographic Log – Seven Rivers Queen (1RP-5218)

 <p>DIRECTION 154 deg(T)      32.41849°N 103.27033°W      ACCURACY 4 m DATUM WGS84</p> <p>2018-11-05 16:30:16-06:00</p>	<p>The subject site experienced a release of low-chloride (less than 6,000 ppm) produced water. The flow path is visible and shows that the water traveled down-gradient into a pit that had previously been utilized as a source of caliche. This caliche pit was in the process of being closed when the release occurred. The free liquids were removed promptly and properly disposed of by the client. White flags to mark the affected areas as shown in this photograph were in place and accurately denoted the spill path as confirmed by soil sampling.</p>
 <p>DIRECTION 76 deg(T)      32.41814°N 103.26987°W      ACCURACY 41 m DATUM WGS84</p> <p>2019-02-14 10:42:48-06:00</p>	<p>The depth of an excavation point associated with the South Release Path (SRP) is measured while confirmation soil sampling occurs. This area consists primarily of caliche.</p>

DIRECTION  
72 deg(T)

32.41941°N  
103.27002°W

ACCURACY 144 m  
DATUM WGS84



2019-02-14  
14:53:21-06:00

An excavator with special rock teeth is present within the caliche pit. Use of the excavator was necessary given the hard caliche material present at the subject site.

DIRECTION  
164 deg(T)

32.41854°N  
103.27015°W

ACCURACY 4 m  
DATUM WGS84



2019-02-20  
08:28:35-06:00

DIRECTION  
188 deg(T)

32.41867°N  
103.27001°W

ACCURACY 6 m  
DATUM WGS84



2019-02-20  
08:46:27-06:00

Use of the Geoprobe 540UD equipment was possible in areas where underground piping was not anticipated to be present and where its use had been approved. Discrete depth sampling was possible using direct push technology.

In some locations, the use of an excavator or Geoprobe was not possible due to safety concerns. In those instances, a stainless-steel hand auger was utilized to obtain discrete depth soil samples.



A bulldozer was utilized to blend and feather the Seven Rivers Queen location after confirmation sampling demonstrated that concentrations of relevant constituents of concern were below their respective regulatory limits.



A final photograph taken on June 10, 2019 shows that feathering to local topography has been achieved.