

**Underground Storage Tank
System Replacement Report
7-Eleven Store No. 22561
3280 Southwest Avalon Way,
Seattle, Washington**

Facility/Site No.: 35259244

Cleanup Site ID No.: 8829

UST Site No. 8604

ERTS No.: 668758



Prepared for:

7-Eleven Inc.

P.O. Box 711

Dallas, TX 75221-0711

Prepared by:

Stantec Consulting Services Inc.

11130 NE 33rd Place, Suite 200

Bellevue, Washington 98004

January 5, 2017

Sign-off Sheet

This document entitled Underground Storage Tank System Replacement Report 7-Eleven Store Number 22561, 3280 Southwest Avalon Way, Seattle, Washington, was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of 7-Eleven Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.



Prepared by _____
(signature)

Andrea Schweiter, Geologic Consultant



Digitally signed by Paul Fairbairn
Date: 2017.01.05 09:30:24 -08'00'

Reviewed by _____
(signature)

Paul Fairbairn, Project Manager



Reviewed by _____
(signature)

Adam Valenti, Project Engineer



Table of Contents

ABBREVIATIONS	III
1.0 INTRODUCTION	1.1
1.1 PURPOSE AND SCOPE OF WORK	1.1
1.2 SITE BACKGROUND	1.2
1.3 REGULATORY STATUS	1.3
1.4 CONSTITUENTS OF POTENTIAL CONCERN	1.5
1.5 PROPERTY LOCATION	1.5
1.6 SITE DESCRIPTION	1.5
1.7 SURROUNDING LAND USE	1.6
1.8 REGIONAL GEOLOGY	1.6
1.9 REGIONAL HYDROGEOLOGY	1.7
2.0 FIELD ACTIVITIES	2.8
2.1 UST REMOVAL ACTIVITIES	2.8
2.2 SUBSURFACE CONDITIONS	2.9
2.2.1 Soil	2.9
2.2.2 Groundwater	2.9
2.3 FIELD SCREENING AND SOIL AND WATER SAMPLING ACTIVITIES	2.9
2.3.1 Field Screening	2.9
2.3.2 Soil Sampling Activities	2.9
2.3.3 Water Sampling Activities	2.11
3.0 REMEDIAL ACTIONS	3.13
3.1 EXCAVATION AND SOIL DISPOSAL	3.13
3.2 DEWATERING ACTIVITIES	3.13
3.2.1 Extracted Water Quality Sampling and Results	3.13
4.0 UST INSTALLATION ACTIVITIES	4.14
4.1 SOIL BACKFILLING AND SITE RESTORATION	4.14
5.0 SUMMARY AND CONCLUSIONS	5.15
6.0 REFERENCES	6.16

UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

LIST OF TABLES

Table 1	Cumulative Soil Analytical Results
Table 2	Cumulative Groundwater Analytical Results

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan with Soil Sample Locations
Figure 3	Site Plan with New UST Configuration

LIST OF APPENDICES

Appendix A	Ecology's No Further Action Determination
Appendix B	Ecology's 30 Day Notice
Appendix C	Waste Documentation
Appendix D	Ecology's Permanent Closure Notice and Site Check/Site Assessment Checklist
Appendix E	Photographic Record
Appendix F	Laboratory Analytical Reports
Appendix G	King County Discharge Authorization and City of Seattle Side Sewer Permit
Appendix H	Discharge Monitoring Report

UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

Abbreviations

7-Eleven	7-Eleven, Inc.
bgs	Below ground surface
BTEX	Benzene, toluene, ethyl benzene, and total xylenes
CCS	Cowlitz Clean Sweep Inc.
Ecology	Washington State Department of Ecology
EDB	Ethylene Dibromide
EDC	1,2-Dichloroethane
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
HASP	Health and Safety Plan
ID	Identification
LUST	Leaking Underground Storage Tank
Mar Vac	Marine Vacuum
mg/kg	Milligrams per kilogram
msl	Mean Sea Level
MTBE	Methyl tertiary-butyl ether
MTCA	Model Toxics Control Act
NFA	Ecology's No Further Action Determination
No.	Number
PID	Photoionization Detector
ppm	Parts per million
Property	The parcel located at 3280 SW Avalon Way in Seattle, WA
Site	7-Eleven Store Number 22561; including all Site facilities
Stantec	Stantec Consulting Services Inc.
Total Naphthalenes	The sum of Naphthalene, 1-Methyl Naphthalene, and 2-Methyl Naphthalene
TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
TPH-O	Total petroleum hydrocarbons as motor oil
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) was retained by 7-Eleven, Inc. (7-Eleven) to provide documentation of the underground storage tank (UST) system removal at 3280 Southwest Avalon Way in Seattle, Washington (the Property, **Figure 1**); 7-Eleven Store Number 22561 (the Site, **Figure 2**). The work was conducted October 11th through November 3, 2016 in accordance with the Washington State Department of Ecology (Ecology) document: "Guidance for Site Checks and Site Assessments for Underground Storage Tanks" [Ecology, February 1991 (revised April 2003)]. Site assessment activities were performed by Andrea Schweiter, a certified Washington State Site Assessor (#8199671) as required by Washington Administrative Code 173-360-610.

1.1 PURPOSE AND SCOPE OF WORK

Stantec observed the removal of three 12,000-gallon double-wall steel USTs with corrosion resistant composite, two dispensers, associated product piping, and vent risers at the Site. Stantec collected UST closure soil samples to assess subsurface conditions adjacent to and beneath the former USTs, dispensers, and product piping. Stantec's scope of work consisted of the following tasks:

- Preparation of a Site-specific Health and Safety Plan (HASP).
- Notification to Ecology 30 days prior to UST removal.
- Notification to 7-Eleven 10-business days in advance of construction activities.
- Observation and documentation of the dispenser island, product piping, and UST decommissioning activities.
- Inspection of the condition of the USTs, dispensers, and product piping upon removal.
- Collection of compliance soil samples from the UST excavation, stockpiles, and beneath the product lines and former dispensers for the purpose of:
 - Logging subsurface conditions.
 - Field screening soil samples for organic vapors using a photoionization detector (PID).
 - Submitting selected soil samples for laboratory analysis.
- Collection of water compliance samples for permit-authorized discharge of construction dewatering to the King County sewer system.
- Preparation of this report.

1.2 SITE BACKGROUND

The Site is a 7-Eleven-branded retail gasoline service station and convenience store located at the northeastern corner of the intersection of Southwest Avalon Way and 35th Avenue Southwest, in Seattle, King County, Washington (**Figure 2**). The Property has historically been listed under several additional addresses: 4414 - 4422 35th Avenue Southwest in Seattle, Washington.

According to a review of historic aerial photographs (HistoricAerials.com, 2016) for 1936, the Property appeared to be occupied by a residential structure. In aerial photographs for 1968 and 1969, the Property appeared to be occupied with several structures resembling a retail petroleum service station. The Property was redeveloped in 1980 (King County Assessor, 2016) with the current Site features (**Figure 2**). The exact location of the service station facilities prior to 1980 is not known and therefore not depicted in the attached figures.

Site facilities include a service station building, a canopy, two dispenser islands, and USTs. Three 12,000-gallon steel USTs were installed in 1980 and replaced in 1997. The Site historically stored and dispensed a variety of gasolines including: premium unleaded, medium-graded unleaded, regular unleaded, and leaded regular.

As described further in this report (**Section 3.0**), the three 12,000-gallon USTs (circa 1997), dispenser islands, and product piping were removed and replaced in October and November 2016. The newly installed double-walled, fiberglass USTs include a 20,000-gallon UST containing regular unleaded gasoline, and a double compartment UST containing 8,000 gallons of premium unleaded gasoline and 12,000 gallons of diesel (**Section 5.0**). 7-Eleven has no record of historically selling diesel at this facility.

Investigations performed on-Site include:

In December 1993, Groundwater Technology completed a subsurface investigation in the area surrounding the USTs (Groundwater Technology, 1994). Three soil borings were advanced to depths of 20, 25, and 30 feet below ground surface (bgs) in an effort to characterize the local hydrogeology and geology, and to determine the presence, if any, of petroleum hydrocarbons. One soil sample collected from each boring (at depths of 15, 20, and 25 feet bgs) was submitted for laboratory analysis. The soil samples were below Ecology's Model Toxics Control Act (MTCA) Method A cleanup levels. The soil borings were completed as permanent monitoring wells (MW-1 through MW-3); groundwater samples collected from the newly installed wells were also below MTCA Method A cleanup levels. Soil analytical results are presented in **Table 1** and groundwater sampling results are presented in **Table 2**.

In December 1997, Fluor Daniel GTI observed the decommissioning of the three 12,000-gallon steel USTs and associated piping (Fluor Daniel GTI, 1998). The eastern-most UST appeared to be in good condition with some rusting. The remaining two USTs appeared to be rusted and pitted, each containing a small hole. Approximately 220 cubic yards of soil was excavated and transported off-Site for disposal and approximately 5,000 gallons of water was removed from the excavation, bioremediated with hydrocarbon-consuming bacteria, and discharged in King County's sanitary sewer system. Confirmation soil samples were collected from the base and sidewalls of the excavation. All the confirmation soil samples were below MTCA Method A cleanup levels with the exception of one soil sample collected from the base of the excavation,

UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

underneath the western-most UST; TPB-3 exceeded MTCA Method A cleanup level for benzene (0.153 milligrams per kilogram [mg/kg]). Soil analytical results are presented in **Table 1**. The depth of the final limits of the excavation and the depths of the confirmation soil samples was not reported. Three double-walled steel 12,000 gallon USTs containing unleaded gasoline were installed in the same tank pit.

In February 2012, Stantec Consulting Services, Inc. conducted environmental monitoring and sampling during the replacement of three spill buckets on-Site (Stantec Consulting Services, Inc., 2012). A small amount of petroleum-impacted pea gravel surrounding the spill buckets was placed into three 55-gallon drums and disposed of off-Site. One soil/pea gravel sample was collected from beneath each spill bucket; the samples were below MTCA Method A cleanup levels.

Groundwater monitoring of MW-1 through MW-3 occurred on-Site in February 1994 and December 2005 and quarterly in 2010, 2011, and 2012. Following the receipt of a No Further Action determination from Ecology, all three wells were decommissioned in 2012. Groundwater sampling results are presented in **Table 2**.

1.3 REGULATORY STATUS

Stantec reviewed Ecology electronic databases regarding the regulatory status of the Site.

- Facility/Site Identification Number: 35259244
- UST Site Identification Number: 8604
- Cleanup Site Identification Number: 8829
- LUST Release Identification Number: 4940
- Environmental Report Tracking System (ERTS) Number: 668758

UST Site/Tank Data Summary

Tank Name	Tank Capacity (gallons)	Tank Material	Substance Stored	Installation Date	Removal Date	Tank Status
4RUL	20,000	Double Wall Fiberglass	Unleaded Gasoline	10/21/16	--	Operational
5A PUL /5B DSL	8,000	Double Wall Fiberglass	Unleaded Gasoline	10/21/16	--	Operational
	12,000		Diesel			
NOL2	12,000*	Double Wall Steel	Unleaded Gasoline	12/1/97	10/12/16**	Removed**
REG1	12,000*	Double Wall Steel	Leaded Gasoline	12/1/97	10/12/16**	Removed**
SNL3	12,000*	Double Wall Steel	Unleaded Gasoline	12/1/97	10/12/16**	Removed**
NOL	12,000***	Steel***	Unleaded Gasoline	10/1/80	12/1/97***	Removed



UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

Tank Name	Tank Capacity (gallons)	Tank Material	Substance Stored	Installation Date	Removal Date	Tank Status
REG	12,000***	Steel***	Leaded Gasoline	10/1/80	12/1/97***	Removed
SNL	12,000***	Steel***	Unleaded Gasoline	10/1/80	12/1/97***	Removed

*UST capacity was reported in Ecology's database as 10,000 gallons.

**Ecology has not updated their on-line database and currently reports these USTs as operational.

***Ecology does not report the capacity or tank material, UST details were obtained from Fluor Daniel GTI's 1998 Permanent UST Decommissioning and Closure report.

Cleanup Site Details

An initial release was reported to Ecology on November 22, 1993; details surrounding this release are not known at this time. Subsequently a subsurface investigation was completed in the area surrounding the USTs; a LUST was reported to Ecology on December 3, 1998 (LUST identification number 4940). On April 26, 2012, Ecology issued a No Further Action (NFA) Determination. Ecology determined that no further remedial action was necessary at the Site to clean up contamination associated with LUST identification number 4940. A copy of the NFA Determination is included as **Appendix A**.

As further described in **Section 3.1**, a suspected release was reported to Ecology on November 3, 2016. A soil sample from beneath the product lines (PL-1-4'), collected during the UST decommissioning activities, contained a soil vapor PID reading of 677 parts per million (ppm). Laboratory analysis of the sample confirmed concentrations of petroleum hydrocarbons were below MTCA Method A cleanup levels.

1.4 CONSTITUENTS OF POTENTIAL CONCERN

Based on past and present use of the Site and existing analytical data, constituents of potential concern (COPCs) include the compounds listed in *MTCA 173-340-900 Table 830-1 Required Testing for Petroleum Releases* (Ecology 2007). The following table presents the potential sources of contamination and the corresponding potential COPCs for the Site:

Potential Source(s)	Potential COPCs
Gasoline USTs and Distribution System	<ul style="list-style-type: none">• Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)• Total Petroleum Hydrocarbons (TPH) as Gasoline (TPH-G)• Methyl tertiary butyl ether (MTBE)• Total Lead• 1,2-Dibromoethane (EDB)• 1,2-Dichloroethane (EDC)• Total Naphthalenes (Naphthalene, 1-methyl naphthalene, 2-methyl naphthalene)

7-Eleven has no record of historically selling diesel at this facility. However, 7-Eleven intends to sell gasoline and diesel fuel at the Site following installation of the two new 20,000-gallon double-wall fiberglass USTs. Facility Description

1.5 PROPERTY LOCATION

The Property is located at the northeast corner of the intersection of Southwest Avalon Way and 35th Avenue Southwest in Seattle, Washington. The Property consists of one tax parcel (parcel number 9297301820) with an approximate area of 17,366 square feet. The Property's surface gradient decreases to the southeast; the northwest corner of the Property is at approximately 223 feet above mean sea level (msl) and the southeast corner of the Property is at approximately 212 feet above msl. The Duwamish River is located approximately 1.2 miles to the east of the Property (**Figure 1**).

1.6 SITE DESCRIPTION

The Site is a 7-Eleven-branded retail gasoline service station and convenience store. The convenience store occupies the northern-central portion of the Property, and the USTs and dispenser islands/canopy occupy the west-central and south-central portions of the Property, respectively. A dumpster enclosure is present on the west side of the convenience store. Underground fuel lines run along the eastern side of the USTs south toward the dispenser islands. Underground vent pipes run along the eastern side of the USTs north toward the convenience store. The Site is covered in asphalt and concrete.

Prior to UST decommissioning activities, the Site was occupied by three 12,000-gallon steel USTs which were installed in 1980 and replaced in 1997. The Site historically stored and dispensed a variety of gasolines including: premium unleaded, medium-graded unleaded, regular unleaded, and leaded regular (as indicated in **Section 1.3**).

**UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON**

As described further in this report, the three 12,000-gallon USTs (circa 1997), dispenser islands, and product piping were removed and replaced in October and November 2016. The newly installed double-walled, fiberglass USTs include a 20,000-gallon UST containing regular unleaded gasoline, and a double compartment UST containing 8,000 gallons of premium unleaded gasoline and 12,000 gallons of diesel.

Historic Site features are presented on **Figure 2**.

1.7 SURROUNDING LAND USE

The Property is located in a mixed commercial and residential area of West Seattle (**Figure 1**). The Property is bordered by the following:

North: The Property is bordered to the north by an alley and a Pecos Pit Bar-B-Que restaurant beyond.

South: The Property is bordered to the south by Southwest Avalon Way and residential apartments beyond.

East: The Property is bordered to the east by residential apartments.

West: The Property is bordered to the west by 35th Avenue Southwest and a Taco Time restaurant beyond.

1.8 REGIONAL GEOLOGY

The Property lies within the Puget Lowland. The Lowland is part of a regional north-south trending trough that extends from southwestern British Columbia to near Eugene, Oregon. North of Olympia, Washington, this lowland is glacially carved, with a depositional and erosional history including at least four separate glacial advances/retreats. The Puget Lowland is bounded to the west by the Olympic Mountains and to the east by the Cascade Range. The lowland is filled with glacial and non-glacial sediments consisting of interbedded gravel, sand, silt, till, and peat lenses.

The Geologic Map of Seattle – A Progress Report, indicates that the Property is located near the contacts between Vashon Recessional Outwash and Vashon Ice Contact Deposits.

Vashon Recessional Outwash consists of sand and gravel with local interbeds of silt and clay deposited during the most recent glacial retreat. These materials are generally loose to medium dense and typically have a high rate of permeability. Recessional Outwash typically overlies glacial till on ridges, and is commonly found in valleys overlying older glacial and nonglacial deposits.

Vashon Ice Contact deposits include intercalated glacial till and advance outwash deposits. The outwash materials are generally bedded and the till and outwash bodies are typically irregularly shaped. The till generally consists of sandy silt with gravel which may or may not be glacially consolidated in all areas (Stantec, 2015).

1.9 REGIONAL HYDROGEOLOGY

Shallow groundwater is present beneath the Property from approximately 4 to 12-feet below ground surface (bgs) and the groundwater gradient is generally toward the southeast. The groundwater is perched between somewhat more weathered glacial soils and underlying unweathered materials.

2.0 FIELD ACTIVITIES

2.1 UST REMOVAL ACTIVITIES

7-Eleven contracted Wilkey's Construction, Inc. of Olivehurst, California to remove the three 12,000-gallon, double-wall steel USTs with corrosion resistant composite, and ancillary equipment at the Site. Prior to the initiation of field activities, Stantec submitted a 30-day Notice of UST closure to Ecology (**Appendix B**). Prior to removal of the USTs, the following activities were completed at the Site:

- The Northwest Utility Notification Center (1-800-454-5555) and a private utility locator were contacted to determine the presence and location of underground utilities.
- Electrical service to the dispenser island and USTs was isolated and removed by a 7-Eleven contracted certified electrician.
- The USTs were emptied by 7-Eleven.
- The USTs were inerted by a certified marine chemist.

A Site-specific HASP was prepared as part of the project. The HASP identified potential physical and chemical hazards associated with the proposed field activities and established personal protection standards and mandatory safety practices. The HASP included information on suspected chemical compounds to be encountered, a list of monitoring equipment, the required protective clothing and equipment, a map and directions to the nearest hospital, and a list of emergency telephone numbers. The HASP was available on Site during the field activities. Stantec personnel and subcontractors working on Site were required to review, sign, and comply with the provisions set forth in the HASP.

On October 10, 2016, the remaining product was removed, and the USTs were triple-rinsed. Residual gasoline and rinsate were removed from the USTs by Marine Vacuum, Inc. (Mar Vac) of Seattle, Washington, and transported to an appropriate treatment and disposal facility. The three USTs were rendered inert using carbon dioxide by Sound Testing, Inc. Testing with a portable multi-gas detector equipped with a lower-explosive limit meter confirmed that the organic vapor levels in the USTs were safe prior to their removal.

On October 12, 2016, Stantec observed the removal of three 12,000-gallon, double-wall steel USTs with corrosion resistant composite. The three USTs were transported by Mar Vac for disposal (**Appendix C**). The USTs appeared to be in good condition; no apparent failures were observed.

On November 3, 2016, Stantec observed the removal of two dispenser islands and product piping. The dispensers and product lines appeared to be in good condition; no apparent failures were observed. However, a soil sample from beneath the product lines (PL-1-4') contained a soil vapor PID reading of 677 ppm. A potential release was reported to Ecology on November 3, 2016. Laboratory analysis of the sample confirmed concentrations of contaminants were below MTCA Method A cleanup levels.

**UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON**

UST disposal manifests are provided in **Appendix C**. The Ecology Permanent Closure Notice for Underground Storage Tanks and Site Check/Site Assessment Checklist for Underground Storage Tanks are included in **Appendix D**. UST removal activities are seen in photographs in **Appendix E**.

2.2 SUBSURFACE CONDITIONS

2.2.1 Soil

During UST removal activities, Stantec observed approximately three to four inches of concrete underlain by fill (a mixture of pea gravel and sand with silt). The sand and pea gravel mixtures extended from the base of the concrete to the depth of the bottom of the USTs: to approximately 14 feet bgs near the northwest corner of the UST excavation and approximately 12 feet bgs near the southeast corner of the UST excavation. Glacial till extended from approximately 12 to 14-feet bgs to the maximum depth of the excavation (approximately 17-feet bgs).

2.2.2 Groundwater

Groundwater was encountered inside of the UST basin at approximately 8.5 feet bgs. Three to five feet of groundwater was present after the USTs were removed. The water was sampled and removed from the Site for proper disposal (**Section 4.2**). Groundwater analytical results are presented in **Table 2**.

2.3 FIELD SCREENING AND SOIL AND WATER SAMPLING ACTIVITIES

2.3.1 Field Screening

Field screening consisted of visual observations of potential hydrocarbon impacts and headspace analysis for volatile organic compound (VOC) vapors. Overburden material removed from the UST and dispenser island excavation was screened for organic vapors with a MiniRae, Inc., PID. A sample of the soil matrix was placed in a re-sealable plastic bag and allowed to equilibrate for approximately 10 minutes. The probe of the PID was used to pierce the plastic and extended into the headspace above the soil surface. The highest vapor reading obtained during the next 60 seconds was then recorded. Prior to use, the PID was calibrated to a known concentration of isobutylene, in accordance with the manufacturer's specifications.

PID readings obtained from the UST basin soil stockpile ranged from 6.9 to 63.7 ppm. PID readings from the dispenser area and product lines ranged from 8.2 to 677 ppm. PID readings are included in **Table 1**.

2.3.2 Soil Sampling Activities

According to Section 5.2.3 of the Guidance for Site Checks and Site Assessments for Underground Storage Tanks (the Guidance), soil samples are generally collected where field

UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

instruments indicate contamination exists, or where contamination is most likely to occur: the lowest point of the interface between the backfill material and native soil. Groundwater was encountered inside the UST basin at approximately 8.5 feet bgs. Therefore, the soil samples collected within the UST basin were collected at the approximate top of the water table (approximately 8.5 feet bgs). Due to the presence of groundwater in the UST excavation, a base soil sample was not collected; a sample of the water within the UST pit was collected and is described further in **Section 3.3.3**. Soil samples collected from beneath the dispenser islands and product lines were collected at the interface between the backfill material and native soil (approximately 4 feet bgs).

Due to Site limitations and safety concerns, soil samples were collected from the center of the excavator bucket; taking reasonable care not to touch the sides of the bucket or include surface soils in the sample.

A total of 14 compliance soil samples were collected during the UST system replacement. Stantec personnel collected soil samples from:

- Stockpiled Soil Samples: SP-1 through SP-6
- UST Excavation Sidewall Samples: N-SW-8.5', S-SW-8.5', E-SW-8.5', and W-SW-8.5'
- Dispenser Island Samples: DI-1-4' and DI-2-4'
- Product Line Samples: PL-1-4' and PL-2-4'

2.3.2.1 Soil Analytical Methods

Soil samples submitted for laboratory analysis were collected in accordance with United States Environmental Protection Agency (EPA) Method 5035A; using a syringe-type sampler to obtain approximately five grams of soil from the desired sample location. The samples were then placed directly into pre-weighed, methanol preserved, 40-milliliter vials (supplied by the analytical laboratory). Additional soil was collected by hand and placed directly into a clean 4-ounce glass jar. A clean, disposable glove was used for each sample. Care was taken to obtain representative soil samples and to place the soils quickly and directly into the sample container to minimize loss of volatile constituents. Each jar was completely filled to minimize headspace and sealed with a Teflon-lined screw cap. Each sample was then labeled and placed on ice in a cooler.

All soil samples were delivered under chain-of-custody protocol to TestAmerica Inc. in Nashville, Tennessee and Fremont Analytical in Seattle, Washington for analysis of the following:

- Stockpiled Soil Samples:
 - TPH-G by Ecology Method NWTPH-Gx
 - BTEX by EPA Method 8260C
 - TPH as Diesel (TPH-D) and oil (TPH-O) by Ecology Method NWTPH-Dx
 - Total Metals by EPA Method 6020 (Samples SP-1 through SP-3 only)
 - RCRA 8 Metals by EPA Method 6020 (Samples SP-4 through SP-6 only)



**UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON**

- UST Excavation Sidewall Samples:
 - TPH-G by Ecology Method NWTPH-Gx
 - BTEX, EDB, EDC, MTBE by EPA Method 8260C
 - Total Naphthalenes by EPA Method 8270D
 - Total Lead by EPA Method 6010C
 - TPH-D and TPH-O by Ecology Method NWTPH-Dx
 - RCRA Metals (Sample S-SW-8.5' only) by EPA Method 6010C
- Dispenser Island and Product Line Samples:
 - TPH-G by Ecology Method NWTPH-Gx
 - BTEX, EDB, EDC, MTBE by EPA Method 8260C
 - TPH-D by Ecology Method NWTPH-Dx, Total Naphthalenes by EPA Method 8270D, and Total Lead by EPA Method 6010C (Sample PL-1-4' only)

7-Eleven has no record of historically selling diesel on-Site. However, because one of the replacement USTs will hold diesel, confirmation soil samples collected during the UST decommissioning event were also analyzed for TPH-D and TPH-O in an effort to establish soil baseline levels.

2.3.2.2 Soil Analytical Results

Soil analytical results are summarized in **Table 1**. Complete laboratory results and chain-of-custody documentation are included in **Appendix F**.

Soil analytical results of samples collected from stockpiled soil, the UST excavation sidewalls, and from beneath dispenser islands and product lines were below MTCA Method A cleanup levels.

2.3.3 Water Sampling Activities

The Site was issued an NFA in April 2012, which determined that no further remedial action was necessary at the Site to clean up contamination associated with LUST identification number 4940. Therefore, the three groundwater monitoring wells on-Site (MW-1 through MW-3) were decommissioned.

Samples representative of current groundwater conditions could not be collected. In accordance with Section 5.3 of the Guidance, water must be collected from the UST excavation when the lowest point of the UST system is located in groundwater. A water sample was collected from the UST excavation. This sample is not a representative sample of current groundwater conditions and therefore should not be relied upon in determining if a release has occurred from the UST system.

2.3.3.1 Water Analytical Methods

A grab sample was collected of water within the UST excavation. The sample was delivered under chain-of-custody protocol to Fremont Analytical in Seattle, Washington for analysis of the following:



UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON

- TPH-G by Ecology Method NWTPH-Gx
- BTEX and EDC by Ecology Method 8260C
- EDB by EPA Method 8011
- Total Lead by EPA Method 200.8

2.3.3.2 Water Analytical Results

Water analytical results are summarized in **Table 2**. Complete laboratory results and chain-of-custody documentation are included in **Appendix F**.

Analytical results of water collected from within the UST excavation exceeded MTCA Method A cleanup levels for TPH-G and BTEX.

3.0 REMEDIAL ACTIONS

3.1 EXCAVATION AND SOIL DISPOSAL

Pea gravel removed during UST decommissioning activities was determined suitable to use as backfill when installing new USTs; PID vapor readings were between 0 and 7.4 ppm and did not appear to be impacted by petroleum products.

During the activities associated with the installation of shoring for the two new USTs, a slight vapor was detected within disturbed soil at the southern end of the excavation (PID vapor readings of 45.7 to 63.7 ppm). It was determined that the potentially-impacted soil could not be stockpiled on-Site due to space limitations. The contractor was given the approval to mix the potentially-impacted soil with the clean pea gravel; that was temporarily used when installing shoring.

Four soil samples were collected from this area: SP-4, SP-5, SP-6, and a base sample near the southern extent of the new excavation boundary (Base-1-17'). Each of the soil samples were below MTCA Method A cleanup levels (**Table 1**).

Soil (and pea gravel) excavated during the UST decommissioning, installation of two new USTs, and utility trenching for the new USTs was exported off-Site. A total of 1,970.56 tons of soil was disposed of at Republic Services Roosevelt Regional Landfill in Roosevelt, Washington. The excavation boundaries are presented on **Figure 2** and Waste Documentation is provided as **Appendix C**.

3.2 DEWATERING ACTIVITIES

Stantec contracted Cowlitz Clean Sweep Inc. (CCS) to dewater the UST basin by way of a temporary treatment system consisting of a weir tank, bag filters, and granular activated carbon vessels. Stantec obtained a discharge authorization letter from the King County Wastewater Treatment Division, Industrial Waste Program on May 25, 2016 (extension obtained June 24, 2016) and a Side Sewer Permit from the City of Seattle on August 5, 2016, **Appendix G**. Approximately 5,260 gallons of treated water was disposed of in the City of Seattle's sanitary sewer (**Appendix H**).

3.2.1 Extracted Water Quality Sampling and Results

As required by King County's discharge authorization, CCS and Stantec maintained a daily record of the discharge volume, discharge rate, settleable solids, and pH. Stantec collected a sample of the treated water weekly which was analyzed for Nonpolar FOG (fats, oils, and grease) and BTEX. Each of the water samples were collected from the granular activated carbon vessel effluent. Analytical results of the extracted groundwater samples were below MTCA Method A cleanup levels and within the permitted limits for discharge to the sanitary sewer (**Table 2**).



4.0 UST INSTALLATION ACTIVITIES

Following removal of the three 12,000-gallon double-wall, steel USTs, two new 20,000-gallon double-wall fiberglass USTs (one single compartment and one dual compartment) were installed at the Site. The dual compartment UST is designed to store 8,000 gallons of premium unleaded gasoline and 12,000 gallons of diesel fuel. The single compartment UST is designed to store 20,000 gallons of regular unleaded gasoline. The new USTs were set in place on October 21, 2016. The layout of the newly installed USTs is presented in **Figure 3**.

4.1 SOIL BACKFILLING AND SITE RESTORATION

All of the soil excavated from the tank pit was removed and disposed of off-Site as described in **Section 4.1**. Upon installation of the new USTs, the tank pit was backfilled first with crushed rock and then with clean imported pea gravel to near the surface. Clean imported fill material was then applied and compacted in lifts to surface grade. The area above the tanks and around the dispensers was then resurfaced with concrete. Asphalt was used to resurface the remaining area.

5.0 SUMMARY AND CONCLUSIONS

Stantec observed the removal of three 12,000-gallon double-wall steel USTs with corrosion resistant composite, two dispensers, associated product piping, and vent risers at the Site from October 11th through November 3, 2016 (**Figure 2**). Following the UST system removal, a new 20,000-gallon fiberglass dual-compartment double-wall UST (premium gasoline and diesel fuel), a new 20,000-gallon fiberglass double-wall UST (regular unleaded gasoline), new dispensers, and associated piping were installed at the Site (**Figure 3**).

Based on field observations and analytical data, Stantec concludes the following:

- Upon removal and visual inspection, the USTs, dispensers, and product lines appeared to be in good condition, and no apparent failures were observed.
 - Soil samples were collected from the limits of the excavation and were below MTCA Method A cleanup levels.
 - Water was encountered at 8.5 feet bgs within the UST excavation; no bottom soil samples were collected.
 - Soil with elevated PID readings was encountered beneath a product line. A potential release was reported to Ecology on November 3, 2016. Laboratory analysis confirmed concentrations of contaminants were below MTCA Method A cleanup levels.
- Samples representative of current groundwater conditions could not be collected. A water sample was collected from the UST excavation. Analytical results exceeded MTCA Method A cleanup levels for TPH-G and BTEX. This sample is not a representative sample of current groundwater conditions and therefore should not be relied upon in determining if a release has occurred from the UST system.
- Approximately 1,970.56 tons of soil was removed from the Site. The excavated area was backfilled with clean, imported fill material. The fill was compacted to meet ASTM D1557 standards.
- Approximately 5,260 gallons of water was collected from the UST excavation, treated, and disposed of in the City of Seattle's sanitary sewer.
- Two new 20,000-gallon double-wall fiberglass USTs (one single compartment and one dual compartment) were installed at the Site on October 21, 2016. 7-Eleven intends to utilize the new UST system to store and sell unleaded gasoline and diesel fuel.

The results of this Site check / Site assessment indicate that a confirmed release of a regulated substance **has not** occurred. Stantec recommends **no further action** at this Site.

**UNDERGROUND STORAGE TANK SYSTEM REPLACEMENT REPORT
7-ELEVEN STORE NO. 22561
3280 SOUTHWEST AVALON WAY, SEATTLE, WASHINGTON**

6.0 REFERENCES

- Fluor Daniel GTI. *Report of Permanent UST Decommissioning and Closure at Southland Facility #22561, 4415 35th Avenue SW, Seattle, WA.* November 30, 1998.
- Groundwater Technology. *Site Assessment Report, Southland Store No. 22561, 4415-22 35th Street, Seattle, WA.* June 1994.
- HistoricAerials.com. *Historic and Modern Imagery.* Accessed on December 15, 2016.
- King County Assessor. *Parcel Search.* Accessed on December 5, 2016.
- Stantec Consulting Service, Inc. *7-Eleven Store No. 22561 – Spill Bucket Replacement.* February, 2012.
- Stantec Consulting Service, Inc. *Geotechnical Report for UST Replacement.* October 20, 2015.
- Washington State Department of Ecology. *Cleanup Site Database.* Accessed on December 5, 2016.
- Washington State Department of Ecology. *Guidance for Site Checks and Site Assessments for Underground Storage Tank Program, Publication No. 90-52.* February 1991, Revised April 2003.
- Washington State Department of Ecology. *Leaking Underground Storage Tank Database.* Accessed on December 5, 2016.
- Washington State Department of Ecology. *Model Toxics Control Act Statute and Regulation, Publication No. 94-06.* Revised November 2007.
- Washington State Department of Ecology. *Underground Storage Tank Database.* Accessed on December 5, 2016.

TABLES

TABLE 1: CUMULATIVE SOIL ANALYTICAL RESULTS

TABLE 2: CUMULATIVE GROUNDWATER ANALYTICAL RESULTS

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS

7-Eleven Store No. 22561
3290 Southway, Everett, Washington

All concentrations are in milligrams per kilogram (mg/kg)

Sample Description	Sample ID	Date	Depth (feet bps)	Petroleum Hydrocarbons			Volatile Organic Compounds							Semi-Volatile Organic Compounds	Metals													
				TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	EDB	EDC	MIBK	Total Naphthalenes	Total Lead	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Groundwater Technology Site Assessment Report, Southland Store No. 22561, June 1994																												
Installation of Monitoring Wells	WW-1-15	12/16/93	15	2.7	<5	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--	--	--	--
	WW-2-10	12/16/93	10	3.1	<5	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--	<5	--	--	--	--	--	--	--	--	--	--	--	--	
	WW-3-1	12/16/93	26	1.3	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	WW-4-1	12/16/93	26	1.3	--	--	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Fluor Daniel GIL Report of Remedial UST Decommissioning and Closure at Southland Facility #22561, November 30, 1998																												
Stockpile Samples	S-1	12/2/97	--	NA	545	--	<0.0500	0.260	2.13	18.3	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	S-2	12/2/97	--	NA	51.9	--	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	S-3	12/2/97	--	NA	17.2	--	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	S-5	12/2/97	--	NA	4.60	--	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
UST PH Samples	TPH-1	12/3/97	NA	NA	9.65	--	<0.0500	0.0152	<0.0500	0.336	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	TPH-2	12/3/97	NA	NA	19.2	--	<0.0500	<0.0500	<0.0500	0.129	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	TPH-3	12/3/97	NA	NA	<5.00	--	0.153	0.387	0.0608	0.297	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	TPH-4	12/3/97	NA	NA	<5.00	--	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
SWR Samples	SWR-1	12/3/97	NA	NA	21.3	--	<0.0500	<0.0500	<0.0500	0.376	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	SWR-2	12/3/97	NA	NA	<5.00	--	<0.0500	<0.0500	<0.0500	0.376	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	SWR-3	12/3/97	NA	NA	<5.00	--	<0.0500	<0.0500	<0.0500	0.376	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	SWR-4	12/3/97	NA	NA	<5.00	--	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--	<25.0	--	--	--	--	--	--	--	--	--	--	--	--	--
Stanlec Consulting Services, Inc., Spill Bucket Replacement, 7-Eleven Store No. 22561, February 2012																												
Stockpile Sample	SP-1	2/14/12	--	667	91	--	<0.02	1.5	0.71	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Spill Bucket Samples	SB-E	2/14/12	3	1.9	<2	--	<0.02	<0.02	<0.02	<0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Spill Bucket Samples	SB-W	2/14/12	4	0.6	<2	--	<0.02	<0.02	<0.02	<0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Stanlec Consulting Services, Inc., UST Replacement Report, 7-Eleven Store No. 22561, December 2016																												
Stockpile Samples	SP-1	10/17/16	--	26.8	<2.0	<21.9	<0.0881	<0.0881	<0.0132	<0.0162	--	--	--	--	2.51	<0.170	2.51	--	0.214	<0.170	28.9	14.0	<0.269	36.9	1.21	<0.0851	<0.170	28.3
	SP-2	10/17/16	--	29.3	<2.68	<21.7	<54.1	<0.0107	<0.0107	<0.0161	<0.0214	--	--	--	2.42	<0.171	3.26	--	0.284	<0.171	33.7	23.1	<0.275	44.1	1.37	<0.0853	<0.171	34.3
	SP-3	10/17/16	--	32.6	<3.57	<18.3	<45.8	<0.0143	<0.0143	<0.0214	<0.0286	--	--	--	2.19	<0.174	2.79	--	0.202	<0.174	30.5	14.7	<0.264	35.1	1.06	<0.0870	<0.174	50.4
	SP-5	10/17/16	--	54.9	<2.52	1.00	<48.5	<0.0101	0.0256	0.0216	--	--	--	--	1.76	--	2.67	40.4	--	--	<0.172	30.8	--	<0.268	--	<0.0869	--	--
UST PH Samples	SP-6	10/17/16	--	63.7	<2.29	226	<47.5	<0.0916	<0.0916	0.0243	0.0245	--	--	--	2.08	--	2.04	56.1	--	--	<0.172	32.4	--	<0.271	--	<0.0860	--	--
	N-SW48.5	10/12/16	8.5	11.8	<2.91	<4.26	<4.26	<0.00883	<0.00883	<0.00883	<0.00883	<0.00883	<0.00883	<0.00354	3.61	--	--	--	--	--	--	--	--	--	--	--	--	
	S-SW48.5	10/12/16	8.5	10.3	<2.77	5.83	9.47	<0.00814	<0.00814	<0.00814	<0.00814	<0.00814	<0.00814	<0.00355	2.29	--	<2.20	26.8	--	<1.10	24.4	--	<0.106	--	<2.20	<1.10	--	
	E-SW48.5	10/12/16	8.5	24.8	<2.45	<4.43	0.00329	0.0173	0.00716	0.0103	<0.00947	<0.00947	<0.00947	<0.00360	3.89	--	--	--	--	--	--	--	--	--	--	--	--	
Dispenser Island Samples	DH-1.4	11/3/16	8	11.7	<3.85	<4.28	<4.28	<0.00883	0.0412	0.06983	0.0286	<0.00883	<0.00883	<0.00360	3.66	--	--	--	--	--	--	--	--	--	--	--	--	--
	DH-1.4	11/3/16	4	8.2	<2.78	--	<0.00902	<0.00902	<0.00902	<0.00902	<0.00902	<0.00902	<0.00902	<0.00902	--	--	--	--	--	--	--	--	--	--	--	--	--	
	PL-2.4	11/3/16	4	6.7	<3.27	<4.66	<4.66	0.0107	0.135	0.0162	0.0959	<0.00981	<0.00981	<0.00378	4.55	--	--	--	--	--	--	--	--	--	--	--	--	
	PL-1.4	11/3/16	4	7.7	<3.27	<5.79	<5.79	<0.00987	0.00142	<0.00957	<0.00957	<0.00957	<0.00957	<0.00378	--	--	--	--	--	--	--	--	--	--	--	--	--	
Product Line Samples	PL-1.4	11/3/16	4	6.7	<3.27	<4.66	<4.66	0.0107	0.135	0.0162	0.0959	<0.00981	<0.00981	<0.00378	4.55	--	--	--	--	--	--	--	--	--	--	--	--	
Product Line Samples	PL-2.4	11/3/16	4	8.6	<3.24	<5.79	<5.79	<0.00987	0.00142	<0.00957	<0.00957	<0.00957	<0.00957	<0.00379	--	--	--	--	--	--	--	--	--	--	--	--	--	
Over-Evaluation	Batch 17	10/19/16	17	6.9	<3.27	<5.79	<5.79	<0.00987	0.00142	<0.00957	<0.00957	<0.00957	<0.00957	<0.00379	--	--	--	--	--	--	--	--	--	--	--	--	--	
MTCA Method A Cleanup Levels																												
				30 / 100 g	2,000	2,000	0.03	7	6	7	0.05	--	0.1	5	250	--	20	--	--	2	2,000	--	2	--	--	--	--	--

Note: = Indicates soil was excavated and removed

< = result is less than the laboratory practical quantitation limit

-- = Not sampled, not analyzed, or not measured

a = Gasoline mixtures without benzene and where the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture have a cleanup level of 100 mg/kg, all other mixtures have a cleanup level of 30 mg/kg

MTCA

EDB = 1,2-Dibromothane by EPA Method 8260B

EDC = 1,2-Dichloroethane by EPA Method 8260B

MIBE = Methyl tertiary-butyl ether by EPA Method 8260B

Total Naphthalenes = The sum of Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene, by EPA Method 8270C

TPH-G = Total petroleum hydrocarbons in the gasoline phase by Ecology Method NWPHDX

TPH-D = Total petroleum hydrocarbons in the diesel phase by Ecology Method NWPHDX

TPH-O = Total petroleum hydrocarbons in the oil range, by Ecology Method NWPHDX

NA = Not Available

TABLE 2
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
7-Eleven Store No. 22561
3280 Southwest Avalon Way, Seattle, Washington
All concentrations in micrograms per liter (µg/L)

Sample Description	Sample ID (TOC feet)	Sample Date	Depth to Water (feet below TOC)	Groundwater Elevation	Petroleum Hydrocarbons			Volatile Organic Compounds									Fats Oil and Grease		
					TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Total Lead	Dissolved Lead	EDB	EDC	MTBE	Non-Polar FOG		
Groundwater Monitoring																			
Groundwater Monitoring	MW-1 (213.87)	2/9/1994	10.54	203.33	70	--	--	--	<0.3	0.3	<0.3	3	<5.0	--	--	--	--	--	
		12/14/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		3/29/2010	7.60	206.27	<100	--	--	--	<1.0	<1.0	<1.0	4.4	--	--	--	--	--	--	
		6/29/2010	4.23	209.64	<100	--	--	--	6.5	<1.0	<1.0	<1.0	--	--	--	--	--	--	
		9/3/2010	5.31	208.56	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		12/16/2010	5.49	208.38	<250	--	--	--	4.6	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		3/19/2011	6.78	207.09	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		6/9/2011	3.48	210.39	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		8/17/2011	4.08	209.79	<250	520	980	<0.50	<0.50	<0.50	<0.50	230	<5.0	<0.010	<0.50	<0.50	--	--	
		12/14/2011	10.11	203.76	<100	600	2,900	<1	<1	<1	<3	--	--	--	--	--	--	--	
		3/19/2012	6.30	207.57	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	29	--	--	<0.50	<0.50	--	--	
		6/26/2012	6.92	206.95	<250	380	<500	<0.50	<0.50	<0.50	<0.50	100	--	--	<0.50	<0.50	--	--	
		WELL ABANDONED ON AUGUST 16, 2012																	
	MW-2 (214.48)	2/9/1994	7.55	206.93	<10	--	--	--	<0.03	<0.03	<0.03	--	<5.0	--	--	--	--	--	
		12/14/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		3/29/2010	--	--	Inaccessible - Well Paved Over														
		6/29/2010	4.43	210.05	<100	--	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	
		9/3/2010	6.45	208.03	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		12/16/2010	6.09	208.39	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		3/19/2011	3.82	210.66	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		6/9/2011	4.02	210.46	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		8/17/2011	5.63	208.85	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.010	<0.50	<0.50	--	--	
		12/14/2011	6.72	207.76	<100	<50	<250	<1	<1	<1	<3	--	--	--	--	--	--	--	
		3/19/2012	6.44	208.04	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	<0.50	<0.50	--	--	
		6/26/2012	5.33	209.15	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	<0.50	<0.50	--	--	
		WELL ABANDONED ON AUGUST 16, 2012																	
	MW-3 (218.59)	2/9/1994	11.26	207.33	<10	--	--	--	<0.3	<0.3	<0.3	<0.5	<5.0	--	--	--	--	--	
		12/14/2005	11.80	206.79	<100	--	--	--	<1.0	<1.0	<1.0	<2.0	<5.0	--	--	--	--	--	
		3/29/2010	7.93	210.66	<100	--	--	--	<1.0	<1.0	<1.0	4.4	--	--	--	--	--	--	
		6/29/2010	7.27	211.32	<100	--	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	
		9/3/2010	9.80	208.79	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		12/16/2010	8.14	210.45	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		3/19/2011	3.81	214.78	<250	--	--	--	2.2	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		6/9/2011	7.41	211.18	<250	--	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	
		8/17/2011	9.15	209.44	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.010	<0.50	<0.50	--	--	
		12/14/2011	5.41	213.18	<100	97	420	<1	<1	<1	<3	--	--	--	--	--	--	--	
		3/19/2012	8.34	210.25	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	<0.50	<0.50	--	--	
		6/26/2012	8.39	210.20	<250	<250	<500	<0.50	<0.50	<0.50	<0.50	<5.0	6.2	--	--	<0.50	<0.50	--	--
		WELL ABANDONED ON AUGUST 16, 2012																	
	Fluor Daniel GTI, Report of Permanent UST Decommissioning and Closure at Southland Facility #22561, November 30, 1998																		
Water Discharge	BT-1	12/4/1997	--	--	176,000	--	--	11,700	30,200	2,640	17,000	--	--	--	--	--	--		
	BT-1	12/30/1997	--	--	18,000	--	--	97.9	553	15.3	799	2.07	--	--	--	--	--		
Stantec Consulting Services, Inc., UST Replacement Report, 7-Eleven Store No. 22561, December 2016																			
UST Pit	GW-TP-1	10/11/2016	--	--	40,200	--	--	308	6,190	1,110	7,160	4.36	--	<0.0100	<1.00	--	--		
Water Discharge	Effluent-1	10/18/2016	--	--	--	--	--	<1.0	<1.0	<1.0	<2.0	--	--	--	--	--	<4,000		
	Effluent-1	10/26/2016	--	--	--	--	--	<1.00	<1.00	<1.00	<3.00	--	--	--	--	--	<3,620		
MTCA Method A Cleanup Levels					800 / 1,000a	500	500	5	1,000	700	1,000	15	--	0.01	5	20	--		

TPH-G = Total petroleum hydrocarbons as gasoline analyzed by NWTPH-Gx
TPH-D = Total petroleum hydrocarbons as diesel analyzed by NWTPH-Dx
TPH-O = Total petroleum hydrocarbons as oil analyzed by NWTPH-Dx
EDB = Ethylene dibromide analyzed by EPA Method 8260B
EDC = 1,2 Dichloroethane analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
< = Less than the laboratory reporting limit
-- = Not sampled, not analyzed or not measured
NS = Not surveyed
MTCA = The Washington State Department of Ecology Model Toxics Control Act
a = The TPH-G cleanup level is reduced from 1,000 µg/L to 800 µg/L if benzene is present in the sample
* = Surveyed Top of Casing Elevation
TOC = Top of Casing

FIGURES

FIGURE 1: SITE LOCATION MAP

**FIGURE 2: SITE PLAN WITH SOIL SAMPLE
LOCATIONS AND LABORATORY
ANALYTICAL RESULTS**

**FIGURE 3: SITE PLAN WITH NEW UST
CONFIGURATION**

LEGEND:

- MW-1 ABANDONED MONITORING WELL
- N-SW-8.5' SOIL SAMPLE (STANTEC, 2016)
- APPROXIMATE PROPERTY BOUNDARY
- FORMER PRODUCT LINE
- UST REMOVAL EXCAVATION (STANTEC 2016)
- UST INSTALLATION EXCAVATION (STANTEC 2016)

SAMPLE ID SAMPLE DEPTH (BGS)

E-SW-8.5'	8.5'
DATE	10/12/16
B	0.00129
T	0.0173
E	0.00176
X	0.0103
TPHG	<2.45
TPH-D	<4.43
TPH-O	<4.43

ANALYTES:

< NOT DETECTED AT OR ABOVE THE LABORATORY REPORTING LIMIT

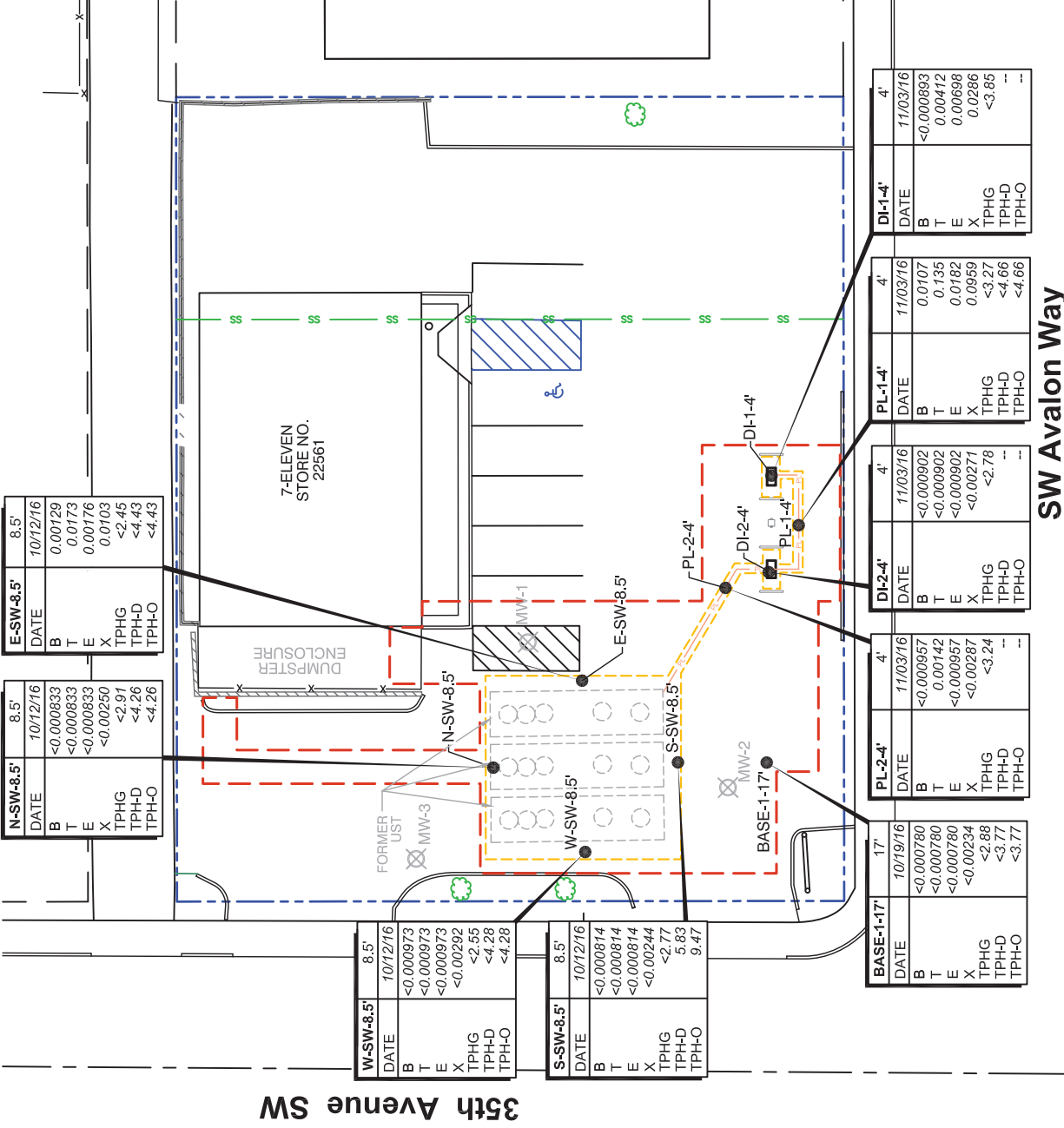
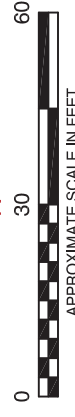
-- NOT ANALYZED

mg/kg MILLIGRAM PER KILOGRAM

bgs BELOW GROUND SURFACE

ANALYTES:

B BENZENE
T TOLUENE
E ETHYLBENZENE
X TOTAL XYLENES
TPH-G TOTAL PETROLEUM HYDROCARBONS
TPH-D AS GASOLINE
TPH-O TOTAL PETROLEUM HYDROCARBONS
AS DIESEL
AS MOTOR OIL



FOR:

STORE NO. 22561
3280 SW AVALON WAY
SEATTLE, WASHINGTON

Stantec
11130 NE 33RD PLACE, SUITE 200
BELLEVUE, WASHINGTON
PHONE: (425) 869-9448 FAX: (425) 869-1190

**SITE PLAN WITH
SOIL SAMPLE LOCATIONS AND
LABORATORY ANALYTICAL RESULTS**

FIGURE:

2

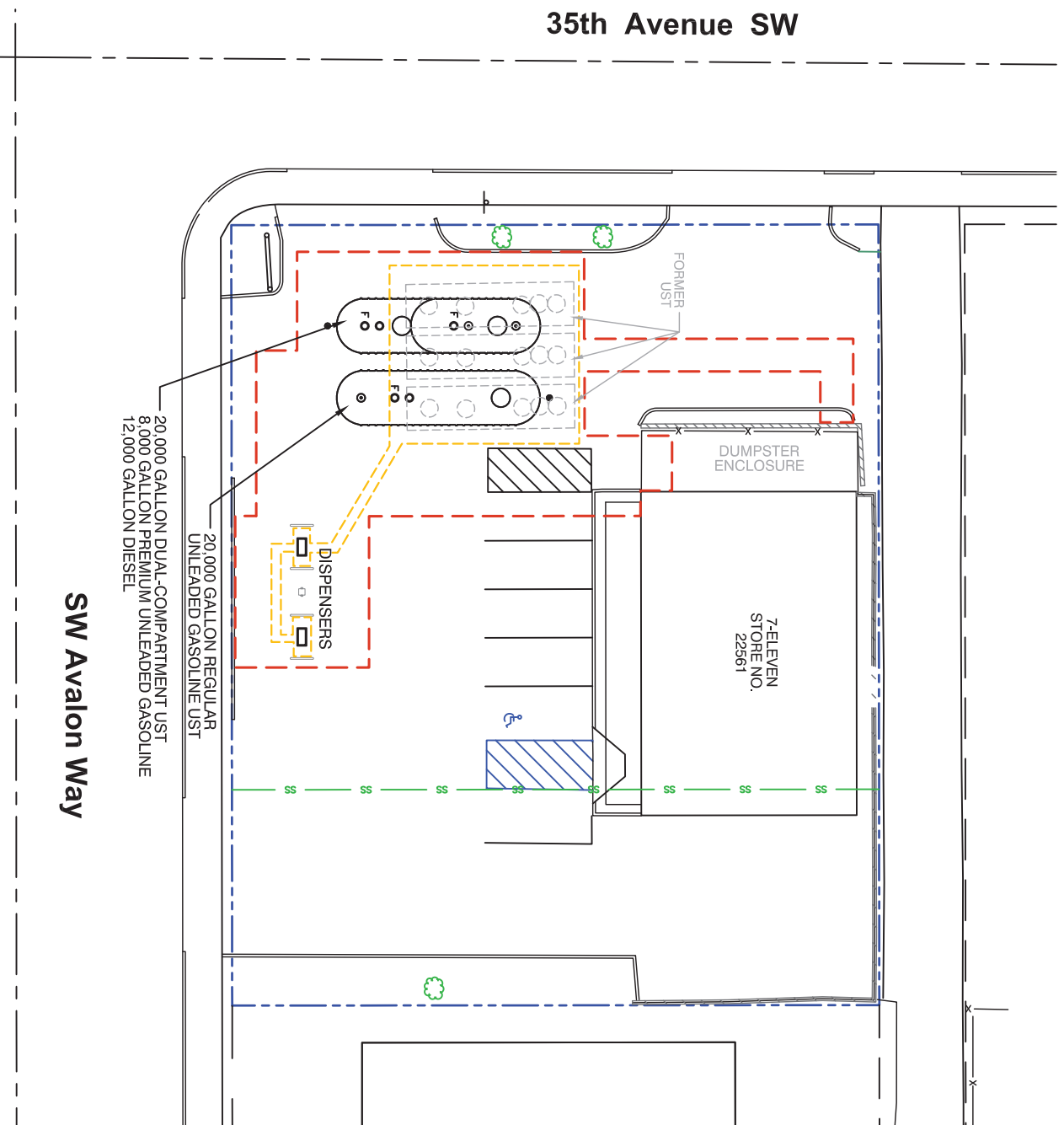
CHECKED BY: AS

APPROVED BY: PF

DATE: 12/16/16

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- - - UST REMOVAL EXCAVATION (STANTEC 2016)
- - - UST INSTALLATION EXCAVATION (STANTEC 2016)



SW Avalon Way

35th Avenue SW



Stantec

11130 NE 33RD PLACE, SUITE 200
BELLEVUE, WASHINGTON
PHONE: (425) 869-9448 FAX: (425) 869-1190

FOR:



STORE NO. 22561
3280 SW AVALON WAY
SEATTLE, WASHINGTON

JOB NUMBER:

185750386

DRAWN BY:

MDR

**SITE PLAN WITH
NEW UST CONFIGURATION-2016**

CHECKED BY:

AS

APPROVED BY:

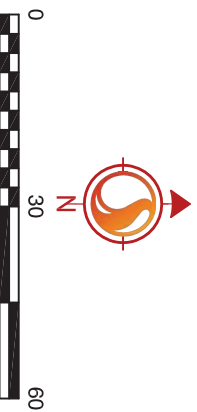
PF

FIGURE:

3

DATE:

12/16/16



APPENDIX A
ECOLOGY'S NO FURTHER ACTION
DETERMINATION



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

April 26, 2012

PROPERTY OWNER
7-Eleven 2307-22561A
3280 SW Avalon
Seattle, WA 98126

**Re: No Further Action (NFA) Determination associated with Leaking
Underground Storage Tank (LUST) Site:**

- Site Name: 7-Eleven 2307-22561A
- Property Address: 3280 SW Avalon, Seattle, WA 98126
- Facility/Site No.: 35259244
- LUST ID: 4940

Dear Property Owner:

Based on the historical information in our files and the last documents submitted to us on 4/24/2006, the Washington State Department of Ecology (Ecology) has determined that the 7-Eleven 2307-22561A site has met the substantive requirements for cleanup under the Model Toxics Control Act (MTCA) regulation Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA").

The MTCA regulation sets strict cleanup standards for sites in Washington State to ensure that the quality of the cleanup is appropriate and is protective of human health and the environment. Depending on the site circumstances and location, one of the three cleanup criteria established under MTCA is used to assess the quality of the cleanup remedy. These are:

- **Method A Cleanup levels:** Used in simple sites with few contaminants of concern (COCs). The Method A cleanup levels consist of a list of the most common hazardous substances for soil and groundwater. The Method A Cleanup levels are very strict, and if met, they allow the property to be used for unrestricted land use.
- **Method B Cleanup levels:** These cleanup levels are established using applicable state and federal laws and the risk assessment equations and other requirements defined in MTCA. Method B is used in more complex sites where the COCs are not included within the set criteria listed on the Method A tables.

April 26, 2012

- **Method C Cleanup levels:** Method C uses the same risk assessment equations and other requirements defined in MTCA but also require a full site-specific risk assessment and an Terrestrial Ecological Evaluation (TEE). Method C is used in industrial sites, when Methods A and C are technically unattainable or lower than background concentrations, and when a significant threat to human health or the environment has been identified.

After a site meets the criteria for soil and groundwater (if applicable), the cleanup is considered to be complete and an NFA letter can be issued.

According to our records, you have conducted cleanup independently and your site meets the Method A Cleanup levels.

- LUST ID No.: 4940,
- Release Notification Date: 11/22/1993,
- Contaminants of Concern: Gas, BTEX,
- Soil is affected: Yes,
- Groundwater is affected: Yes.

Based on this information, Ecology has determined that no further remedial action is necessary at the Property to clean up contamination associated with the LUST. This determination is made only for impacts associated to releases from LUST No. 4940. Based on this opinion, Ecology will update the status of remedial action at the Site on our database of hazardous waste sites and will initiate the process of removing the Site from our lists of hazardous waste sites, including (if applicable):

- Hazardous Sites List.
- Confirmed and Suspected Contaminated Sites List.
- Leaking Underground Storage Tank List.

Removing your site from these lists may include a public notice and/or a public comment period. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

Please understand that this opinion does not settle liability with the state. Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion does not:

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

7-Eleven 2307-22561A
April 26, 2012

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

In addition, this opinion does not constitute a determination of substantial equivalence. To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. See RCW 70.105D.080 and WAC 173-340-545.

Lastly, the state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

If you have any questions about this opinion, please contact me by e-mail at russ.olsen@ecy.wa.gov or by phone at (425) 649-7038.

Sincerely,



Russell E. Olsen, MPA
Voluntary Cleanup Unit Supervisor
Northwest Regional Office
Toxics Cleanup Program

SF: sf

APPENDIX B
ECOLOGY'S 30 DAY NOTICE



30-DAY NOTICE FOR UNDERGROUND STORAGE TANKS

UST ID #: 8604

County: KING

This form provides Ecology 30-days' advanced notice for the following projects, as required by Chapter 173-360 WAC.

Instructions are found on the back page.

Please ✓ the appropriate box: ☒ Intent to Install ☒ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION

II. OWNER/OPERATOR INFORMATION

Tag or UBI # (if applicable): Tag #A0769 or 5780704900010017 Owner/Operator Name: 7-Eleven, Inc.

UST ID # (if applicable): 8604

Business Name: 7-Eleven, Inc.

Site Name: 7-Eleven 22561

RECEIVED

Mailing Address: P.O. Box 711

Site Address: 3280 SW Avalon Way

SEP 02 2016

City: Dallas

State: TX

Zip: 75221

City: Seattle

Phone: (214) 415-0146

Phone: (206) 935-1477

Department of Ecology
Toxics Cleanup Program

Email: marc.westfall@7-11.com

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☒ Installer ☒ Decommissioner ☐ Site Assessor

Company Name: Wilkey's Construction

Certification Type: UST Installation/Retrofitting

Service Provider Name: Dale Adams

Cert. No.: 8188560

Exp. Date: 2/26/2017

Provider Phone: (916) 655-1018

Provider Email: dale@wilkeysconstruction.com

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: Stantec Consulting Services Inc.

Certification Type: ICC Washington State Site Assessment-U7

Service Provider Name: Deitrie Hanson

Cert. No.: 8012337-U7

Exp. Date: 6/11/2018

Provider Phone: (425) 289-7357

Provider Email: deitrie.hanson@stantec.com

IV. TANK INFORMATION

TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
REG	B Unleaded Gasoline	10,000	10/04/2016	Remove three 10,000-gallon gasoline underground storage tanks (USTs) and all associated tank appurtenances.
NOL	B Unleaded Gasoline	10,000	10/04/2016	
SNL	B Unleaded Gasoline	10,000	10/04/2016	
Tank #4	Regular Unleaded	20,000	10/04/2016	Install one new 20,000-gallon fiberglass UST for regular unleaded gasoline and one 20,000-gallon fiberglass split UST and related appurtenances. The split tank will hold 8,000-gallons of premium unleaded and 12,000-gallons of diesel.
Tank #5 A/B	8K Premium Unleaded & 12K Diesel	20,000 gal. split UST 8K Premium and 12K Diesel	10/04/2016	

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANKS

GENERAL INSTRUCTIONS

Under WAC 173-360-200 and 173-360-385, owners and operators are required to notify Ecology at least 30 days prior to beginning underground storage tank (UST) installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each activity. Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by an Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice must be submitted.

Department of Ecology
Underground Storage Tank Section
PO Box 47600
Olympia, WA 98504-7600

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site and owner information completely so that any problems can be resolved quickly. The contact person listed on this form must confirm the exact date an installation and/or decommissioning project will begin at least three business days before proceeding.

TANK INSTALLATIONS

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form also allows you to receive a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period.

To receive additional deliveries, you must complete the Business License application and UST Addendum to obtain your facility compliance tag from Ecology. The registration information must be submitted to the Department of Revenue within 30 days of bringing the system into use in order to receive a Business License with the appropriate tank endorsement(s). **Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.**

PERMANENT TANK CLOSURES

Decommissioning projects must be completed within 90 days after the date stamped on this notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as when product was removed so that no more than one inch of residue remains in the system.

Contact your local fire marshal and planning department prior to tank closure to find out if any additional permits are required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC, may be required.

A site assessment is required at the time of closure. Contamination found or suspected at the site must be reported to the appropriate Ecology regional office within 24 hours. If the contamination is confirmed, a site characterization report must be submitted to the regional office within 90 days; if contamination is not confirmed, a site assessment report must be submitted to the above address within 30 days.

The following are examples of tanks that are exempt from notification requirements.

- ❖ Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- ❖ Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- ❖ Tanks with a capacity of 110 gallons or less.
- ❖ Equipment or machinery tanks such as hydraulic lifts or electrical equipment tanks.
- ❖ Emergency overflow tanks, catch basins, or sumps.

If you need this document in a format for the visually impaired, call Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with speech disability, call (877) 833-6341.



DEPARTMENT OF
ECOLOGY
State of Washington

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANKS

UST ID #: 8604

County: KING

This form provides Ecology 30-days' advanced notice for the following projects, as required by Chapter 173-360 WAC.

Instructions are found on the back page.

Please ✓ the appropriate box: ☒ Intent to Install ☒ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION

II. OWNER/OPERATOR INFORMATION

Tag or UBI # (if applicable): Tag #A0769 or 5780704900010017 Owner/Operator Name: 7-Eleven, Inc.

UST ID # (if applicable): 8604

Business Name: 7-Eleven, Inc.

Site Name: 7-Eleven 22561

RECEIVED

Mailing Address: P.O. Box 711

Site Address: 3280 SW Avalon Way

SEP 02 2016

City: Dallas

State: TX

Zip: 75221

City: Seattle

Phone: (214) 415-0146

Phone: (206) 935-1477

Department of Ecology
Toxics Cleanup Program

Email: marc.westfall@7-11.com

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☒ Installer ☒ Decommissioner ☐ Site Assessor

Company Name: Wilkey's Construction

Certification Type: UST Installation/Retrofitting

Service Provider Name: Dale Adams

Cert. No.: 8188560

Exp. Date: 2/26/2017

Provider Phone: (916) 655-1018

Provider Email: dale@wilkeysconstruction.com

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: Stantec Consulting Services Inc.

Certification Type: ICC Washington State Site Assessment-U7

Service Provider Name: Deitrie Hanson

Cert. No.: 8012337-U7

Exp. Date: 6/11/2018

Provider Phone: (425) 289-7357

Provider Email: deitrie.hanson@stantec.com

IV. TANK INFORMATION

TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
REG	B Unleaded Gasoline	10,000	10/04/2016	Remove three 10,000-gallon gasoline underground storage tanks (USTs) and all associated tank appurtenances.
NOL	B Unleaded Gasoline	10,000	10/04/2016	
BNL	B Unleaded Gasoline	10,000	10/04/2016	
Tank #4	Regular Unleaded	20,000	10/04/2016	Install one new 20,000-gallon fiberglass UST for regular unleaded gasoline and one 20,000-gallon fiberglass split UST and related appurtenances. The split tank will hold 8,000-gallons of premium unleaded and 12,000-gallons of diesel.
Tank #5 A/B	8K Premium Unleaded & 12K Diesel	20,000 gal. split UST 8K Premium and 12K Diesel	10/04/2016	

30-DAY NOTICE FOR UNDERGROUND STORAGE TANKS

GENERAL INSTRUCTIONS

Under WAC 173-360-200 and 173-360-385, owners and operators are required to notify Ecology at least 30 days prior to beginning underground storage tank (UST) installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each activity. Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. **Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by an Ecology UST inspector.** If a project cannot meet the deadlines described below, an additional 30-Day Notice must be submitted.

Department of Ecology
Underground Storage Tank Section
PO Box 47600
Olympia, WA 98504-7600

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site and owner information completely so that any problems can be resolved quickly. **The contact person listed on this form must confirm the exact date an installation and/or decommissioning project will begin at least three business days before proceeding.**

TANK INSTALLATIONS

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form also allows you to receive a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period.

To receive additional deliveries, you must complete the Business License application and UST Addendum to obtain your facility compliance tag from Ecology. The registration information must be submitted to the Department of Revenue within 30 days of bringing the system into use in order to receive a Business License with the appropriate tank endorsement(s). **Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.**

PERMANENT TANK CLOSURES

Decommissioning projects must be completed within 90 days after the date stamped on this notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as when product was removed so that no more than one inch of residue remains in the system.

Contact your local fire marshal and planning department prior to tank closure to find out if any additional permits are required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC, may be required.

A site assessment is required at the time of closure. Contamination found or suspected at the site must be reported to the appropriate Ecology regional office within 24 hours. If the contamination is confirmed, a site characterization report must be submitted to the regional office within 90 days; if contamination is not confirmed, a site assessment report must be submitted to the above address within 30 days.

The following are examples of tanks that are exempt from notification requirements.

- ❖ Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- ❖ Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- ❖ Tanks with a capacity of 110 gallons or less.
- ❖ Equipment or machinery tanks such as hydraulic lifts or electrical equipment tanks.
- ❖ Emergency overflow tanks, catch basins, or sumps.

If you need this document in a format for the visually impaired, call Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with speech disability, call (877) 833-6341.

APPENDIX C

WASTE DOCUMENTATION

Detail Contract Activity Report

January 01, 2016 to December 15, 2016

Specific Contract(s) : 'LW-16252'

All Ticket Types
History and Waiting
* - Confirmed Qty Applied to Billing

All Facilities

LW-16252

Ticket Date	Facility & Ticket Number	Customer	Truck	Material	Billing Quantity	Ordered Quantity	Minimum Quantity	Maximum Quantity	Material Total	Tax Total	Total
10/19/2016 I 01	942655	015233 - Cowlitz Clean Sweep	SOIL	SW-CONT SOIL W/FUI	14.68 TN	0.00	\$0.00	\$0.00	\$660.60	\$0.00	\$660.60
10/19/2016 I 01	942663	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.06 TN	0.00	\$0.00	\$0.00	\$767.70	\$0.00	\$767.70
10/19/2016 I 01	942667	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.94 TN	0.00	\$0.00	\$0.00	\$717.30	\$0.00	\$717.30
10/19/2016 I 01	942672	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.26 TN	0.00	\$0.00	\$0.00	\$776.70	\$0.00	\$776.70
10/19/2016 I 01	942674	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.97 TN	0.00	\$0.00	\$0.00	\$718.65	\$0.00	\$718.65
10/20/2016 I 01	942685	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.05 TN	0.00	\$0.00	\$0.00	\$722.25	\$0.00	\$722.25
10/20/2016 I 01	942686	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	15.81 TN	0.00	\$0.00	\$0.00	\$711.45	\$0.00	\$711.45
10/20/2016 I 01	942687	015233 - Cowlitz Clean Sweep	19 OREGO	SW-CONT SOIL W/FUI	16.71 TN	0.00	\$0.00	\$0.00	\$751.95	\$0.00	\$751.95
10/20/2016 I 01	942689	015233 - Cowlitz Clean Sweep	1 ADVENTI	SW-CONT SOIL W/FUI	15.67 TN	0.00	\$0.00	\$0.00	\$705.15	\$0.00	\$705.15
10/20/2016 I 01	942690	015233 - Cowlitz Clean Sweep	3 FAT DAD	SW-CONT SOIL W/FUI	15.32 TN	0.00	\$0.00	\$0.00	\$689.40	\$0.00	\$689.40
10/20/2016 I 01	942694	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.84 TN	0.00	\$0.00	\$0.00	\$712.80	\$0.00	\$712.80
10/20/2016 I 01	942697	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	11.98 TN	0.00	\$0.00	\$0.00	\$539.10	\$0.00	\$539.10
10/20/2016 I 01	942698	015233 - Cowlitz Clean Sweep	19 OREGO	SW-CONT SOIL W/FUI	15.94 TN	0.00	\$0.00	\$0.00	\$717.30	\$0.00	\$717.30
10/20/2016 I 01	942701	015233 - Cowlitz Clean Sweep	1 ADVENTI	SW-CONT SOIL W/FUI	12.52 TN	0.00	\$0.00	\$0.00	\$563.40	\$0.00	\$563.40
10/20/2016 I 01	942702	015233 - Cowlitz Clean Sweep	3 FAT DAD	SW-CONT SOIL W/FUI	19.51 TN	0.00	\$0.00	\$0.00	\$877.95	\$0.00	\$877.95
10/20/2016 I 01	942705	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.75 TN	0.00	\$0.00	\$0.00	\$753.75	\$0.00	\$753.75
10/20/2016 I 01	942707	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.13 TN	0.00	\$0.00	\$0.00	\$725.85	\$0.00	\$725.85
10/20/2016 I 01	942708	015233 - Cowlitz Clean Sweep	19 OREGO	SW-CONT SOIL W/FUI	15.68 TN	0.00	\$0.00	\$0.00	\$705.60	\$0.00	\$705.60
10/20/2016 I 01	942709	015233 - Cowlitz Clean Sweep	1 ADVENTI	SW-CONT SOIL W/FUI	15.77 TN	0.00	\$0.00	\$0.00	\$709.65	\$0.00	\$709.65
10/20/2016 I 01	942710	015233 - Cowlitz Clean Sweep	3 FAT DAD	SW-CONT SOIL W/FUI	13.25 TN	0.00	\$0.00	\$0.00	\$596.25	\$0.00	\$596.25
10/20/2016 I 01	942711	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.76 TN	0.00	\$0.00	\$0.00	\$754.20	\$0.00	\$754.20
10/20/2016 I 01	942712	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.03 TN	0.00	\$0.00	\$0.00	\$721.35	\$0.00	\$721.35
10/20/2016 I 01	942714	015233 - Cowlitz Clean Sweep	19 OREGO	SW-CONT SOIL W/FUI	14.15 TN	0.00	\$0.00	\$0.00	\$636.75	\$0.00	\$636.75
10/20/2016 I 01	942716	015233 - Cowlitz Clean Sweep	1 ADVENTI	SW-CONT SOIL W/FUI	13.22 TN	0.00	\$0.00	\$0.00	\$594.90	\$0.00	\$594.90
10/20/2016 I 01	942717	015233 - Cowlitz Clean Sweep	3 FAT DAD	SW-CONT SOIL W/FUI	16.48 TN	0.00	\$0.00	\$0.00	\$741.60	\$0.00	\$741.60
10/20/2016 I 01	942720	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.91 TN	0.00	\$0.00	\$0.00	\$715.95	\$0.00	\$715.95
10/24/2016 I 01	942787	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.14 TN	0.00	\$0.00	\$0.00	\$771.30	\$0.00	\$771.30
10/24/2016 I 01	942788	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	13.28 TN	0.00	\$0.00	\$0.00	\$597.60	\$0.00	\$597.60
10/24/2016 I 01	942792	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	19.11 TN	0.00	\$0.00	\$0.00	\$859.95	\$0.00	\$859.95
10/24/2016 I 01	942794	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	18.22 TN	0.00	\$0.00	\$0.00	\$819.90	\$0.00	\$819.90
10/24/2016 I 01	942803	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	18.15 TN	0.00	\$0.00	\$0.00	\$816.75	\$0.00	\$816.75
10/24/2016 I 01	942805	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	14.72 TN	0.00	\$0.00	\$0.00	\$662.40	\$0.00	\$662.40
10/24/2016 I 01	942813	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.74 TN	0.00	\$0.00	\$0.00	\$798.30	\$0.00	\$798.30
10/24/2016 I 01	942815	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.96 TN	0.00	\$0.00	\$0.00	\$763.20	\$0.00	\$763.20
10/24/2016 I 01	942819	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.10 TN	0.00	\$0.00	\$0.00	\$769.50	\$0.00	\$769.50
10/24/2016 I 01	942821	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.49 TN	0.00	\$0.00	\$0.00	\$742.05	\$0.00	\$742.05
10/24/2016 I 01	942825	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	18.18 TN	0.00	\$0.00	\$0.00	\$818.10	\$0.00	\$818.10
10/24/2016 I 01	942830	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.84 TN	0.00	\$0.00	\$0.00	\$757.80	\$0.00	\$757.80

Detail Contract Activity Report

January 01, 2016 to December 15, 2016

Specific Contract(s) : 'LW-16252'

All Ticket Types

History and Waiting

* - Confirmed Qty Applied to Billing

10/24/2016 I 01	942840	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.60	TN	0.00	\$0.00	\$792.00	\$0.00	\$792.00	\$792.00
10/24/2016 I 01	942844	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	18.33	TN	0.00	\$0.00	\$824.85	\$0.00	\$824.85	\$824.85
10/24/2016 I 01	942849	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.43	TN	0.00	\$0.00	\$739.35	\$0.00	\$739.35	\$739.35
10/24/2016 I 01	942850	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	20.17	TN	0.00	\$0.00	\$907.65	\$0.00	\$907.65	\$907.65
10/24/2016 I 01	942853	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.90	TN	0.00	\$0.00	\$805.50	\$0.00	\$805.50	\$805.50
10/24/2016 I 01	942857	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	14.14	TN	0.00	\$0.00	\$636.30	\$0.00	\$636.30	\$636.30
10/24/2016 I 01	942859	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.73	TN	0.00	\$0.00	\$707.85	\$0.00	\$707.85	\$707.85
10/25/2016 I 01	942873	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	18.65	TN	0.00	\$0.00	\$839.25	\$0.00	\$839.25	\$839.25
10/25/2016 I 01	942879	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	16.88	TN	0.00	\$0.00	\$759.60	\$0.00	\$759.60	\$759.60
10/25/2016 I 01	942886	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.60	TN	0.00	\$0.00	\$792.00	\$0.00	\$792.00	\$792.00
10/25/2016 I 01	942887	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	18.12	TN	0.00	\$0.00	\$815.40	\$0.00	\$815.40	\$815.40
10/25/2016 I 01	942888	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	16.76	TN	0.00	\$0.00	\$754.20	\$0.00	\$754.20	\$754.20
10/25/2016 I 01	942891	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	17.62	TN	0.00	\$0.00	\$792.90	\$0.00	\$792.90	\$792.90
10/25/2016 I 01	942896	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	20.70	TN	0.00	\$0.00	\$931.50	\$0.00	\$931.50	\$931.50
10/25/2016 I 01	942897	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	19.37	TN	0.00	\$0.00	\$871.65	\$0.00	\$871.65	\$871.65
10/25/2016 I 01	942900	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	17.66	TN	0.00	\$0.00	\$794.70	\$0.00	\$794.70	\$794.70
10/25/2016 I 01	942902	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	16.32	TN	0.00	\$0.00	\$734.40	\$0.00	\$734.40	\$734.40
10/25/2016 I 01	942906	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	18.57	TN	0.00	\$0.00	\$835.65	\$0.00	\$835.65	\$835.65
10/25/2016 I 01	942907	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.05	TN	0.00	\$0.00	\$722.25	\$0.00	\$722.25	\$722.25
10/25/2016 I 01	942911	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	18.23	TN	0.00	\$0.00	\$820.35	\$0.00	\$820.35	\$820.35
10/25/2016 I 01	942912	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	16.62	TN	0.00	\$0.00	\$747.90	\$0.00	\$747.90	\$747.90
10/25/2016 I 01	942922	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.91	TN	0.00	\$0.00	\$805.95	\$0.00	\$805.95	\$805.95
10/25/2016 I 01	942923	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	17.64	TN	0.00	\$0.00	\$793.80	\$0.00	\$793.80	\$793.80
10/25/2016 I 01	942924	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	17.05	TN	0.00	\$0.00	\$767.25	\$0.00	\$767.25	\$767.25
10/25/2016 I 01	942925	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	15.83	TN	0.00	\$0.00	\$712.35	\$0.00	\$712.35	\$712.35
10/25/2016 I 01	942934	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.62	TN	0.00	\$0.00	\$792.90	\$0.00	\$792.90	\$792.90
10/25/2016 I 01	942935	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	18.28	TN	0.00	\$0.00	\$822.60	\$0.00	\$822.60	\$822.60
10/25/2016 I 01	942936	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	17.63	TN	0.00	\$0.00	\$793.35	\$0.00	\$793.35	\$793.35
10/25/2016 I 01	942937	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	17.18	TN	0.00	\$0.00	\$773.10	\$0.00	\$773.10	\$773.10
10/25/2016 I 01	942938	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	20.32	TN	0.00	\$0.00	\$914.40	\$0.00	\$914.40	\$914.40
10/25/2016 I 01	942939	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.28	TN	0.00	\$0.00	\$732.60	\$0.00	\$732.60	\$732.60
10/25/2016 I 01	942940	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	19.62	TN	0.00	\$0.00	\$882.90	\$0.00	\$882.90	\$882.90
10/25/2016 I 01	942941	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	15.94	TN	0.00	\$0.00	\$717.30	\$0.00	\$717.30	\$717.30
10/25/2016 I 01	942942	015233 - Cowlitz Clean Sweep	77 L&D TR	SW-CONT SOIL W/FUI	17.38	TN	0.00	\$0.00	\$782.10	\$0.00	\$782.10	\$782.10
10/25/2016 I 01	942943	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.82	TN	0.00	\$0.00	\$801.90	\$0.00	\$801.90	\$801.90
10/25/2016 I 01	942944	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.34	TN	0.00	\$0.00	\$735.30	\$0.00	\$735.30	\$735.30
10/25/2016 I 01	942945	015233 - Cowlitz Clean Sweep	66 L&D	SW-CONT SOIL W/FUI	17.49	TN	0.00	\$0.00	\$787.05	\$0.00	\$787.05	\$787.05
10/26/2016 I 01	942990	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.73	TN	0.00	\$0.00	\$707.85	\$0.00	\$707.85	\$707.85
10/26/2016 I 01	942993	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	12.46	TN	0.00	\$0.00	\$560.70	\$0.00	\$560.70	\$560.70
10/26/2016 I 01	942997	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.26	TN	0.00	\$0.00	\$731.70	\$0.00	\$731.70	\$731.70
10/26/2016 I 01	943001	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.15	TN	0.00	\$0.00	\$726.75	\$0.00	\$726.75	\$726.75
10/26/2016 I 01	943011	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.88	TN	0.00	\$0.00	\$759.60	\$0.00	\$759.60	\$759.60
10/26/2016 I 01	943012	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	12.24	TN	0.00	\$0.00	\$550.80	\$0.00	\$550.80	\$550.80

Detail Contract Activity Report

January 01, 2016 to December 15, 2016

Specific Contract(s) : 'LW-16252'

All Facilities

All Ticket Types
History and Waiting
* - Confirmed Qty Applied to Billing

10/26/2016 I 01	943017	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	18.23	TN	0.00	\$0.00	\$820.35	\$0.00	\$820.35
10/26/2016 I 01	943021	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.93	TN	0.00	\$0.00	\$761.85	\$0.00	\$761.85
10/26/2016 I 01	943022	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	14.42	TN	0.00	\$0.00	\$648.90	\$0.00	\$648.90
10/26/2016 I 01	943023	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.20	TN	0.00	\$0.00	\$774.00	\$0.00	\$774.00
10/27/2016 I 01	943059	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	16.16	TN	0.00	\$0.00	\$727.20	\$0.00	\$727.20
10/27/2016 I 01	943061	015233 - Cowlitz Clean Sweep	3 ADVENTI	SW-CONT SOIL W/FUI	16.80	TN	0.00	\$0.00	\$756.00	\$0.00	\$756.00
10/27/2016 I 01	943065	015233 - Cowlitz Clean Sweep	201 LAWRI	SW-CONT SOIL W/FUI	17.55	TN	0.00	\$0.00	\$789.75	\$0.00	\$789.75
10/27/2016 I 01	943069	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	17.17	TN	0.00	\$0.00	\$772.65	\$0.00	\$772.65
10/27/2016 I 01	943071	015233 - Cowlitz Clean Sweep	3 ADVENTI	SW-CONT SOIL W/FUI	21.49	TN	0.00	\$0.00	\$967.05	\$0.00	\$967.05
10/27/2016 I 01	943076	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	19.08	TN	0.00	\$0.00	\$858.60	\$0.00	\$858.60
10/27/2016 I 01	943081	015233 - Cowlitz Clean Sweep	201 ADAM	SW-CONT SOIL W/FUI	12.27	TN	0.00	\$0.00	\$552.15	\$0.00	\$552.15
10/27/2016 I 01	943085	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	7.99	TN	0.00	\$0.00	\$359.55	\$0.00	\$359.55
10/27/2016 I 01	943090	015233 - Cowlitz Clean Sweep	3 ADVENTI	SW-CONT SOIL W/FUI	18.06	TN	0.00	\$0.00	\$812.70	\$0.00	\$812.70
10/27/2016 I 01	943093	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	18.11	TN	0.00	\$0.00	\$814.95	\$0.00	\$814.95
10/27/2016 I 01	943097	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	14.66	TN	0.00	\$0.00	\$659.70	\$0.00	\$659.70
10/27/2016 I 01	943100	015233 - Cowlitz Clean Sweep	SOIL	SW-CONT SOIL W/FUI	17.19	TN	0.00	\$0.00	\$773.55	\$0.00	\$773.55
10/27/2016 I 01	943103	015233 - Cowlitz Clean Sweep	SOIL	SW-CONT SOIL W/FUI	16.39	TN	0.00	\$0.00	\$737.55	\$0.00	\$737.55
11/01/2016 I 01	943168	015233 - Cowlitz Clean Sweep	SOIL	SW-CONT SOIL W/FUI	6.63	TN	0.00	\$0.00	\$298.35	\$0.00	\$298.35
11/03/2016 I 01	943244	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.65	TN	0.00	\$0.00	\$704.25	\$0.00	\$704.25
11/03/2016 I 01	943249	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.14	TN	0.00	\$0.00	\$681.30	\$0.00	\$681.30
11/03/2016 I 01	943252	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.17	TN	0.00	\$0.00	\$682.65	\$0.00	\$682.65
11/03/2016 I 01	943256	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	14.23	TN	0.00	\$0.00	\$640.35	\$0.00	\$640.35
11/03/2016 I 01	943261	015233 - Cowlitz Clean Sweep	SOIL	SW-CONT SOIL W/FUI	17.54	TN	0.00	\$0.00	\$789.30	\$0.00	\$789.30
11/04/2016 I 01	943276	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.44	TN	0.00	\$0.00	\$694.80	\$0.00	\$694.80
11/04/2016 I 01	943279	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.65	TN	0.00	\$0.00	\$704.25	\$0.00	\$704.25
11/04/2016 I 01	943282	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.63	TN	0.00	\$0.00	\$748.35	\$0.00	\$748.35
11/04/2016 I 01	943286	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	17.17	TN	0.00	\$0.00	\$772.65	\$0.00	\$772.65
11/04/2016 I 01	943288	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	15.64	TN	0.00	\$0.00	\$703.80	\$0.00	\$703.80
11/04/2016 I 01	943290	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	14.62	TN	0.00	\$0.00	\$657.90	\$0.00	\$657.90
11/04/2016 I 01	943294	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.62	TN	0.00	\$0.00	\$747.90	\$0.00	\$747.90
11/04/2016 I 01	943298	015233 - Cowlitz Clean Sweep	02BOWMA	SW-CONT SOIL W/FUI	16.03	TN	0.00	\$0.00	\$721.35	\$0.00	\$721.35
11/04/2016 I 01	943301	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	35.19	TN	0.00	\$0.00	\$1,583.55	\$0.00	\$1,583.55
11/10/2016 I 01	943435	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	19.37	TN	0.00	\$0.00	\$871.65	\$0.00	\$871.65
11/11/2016 I 01	943504	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	14.53	TN	0.00	\$0.00	\$653.85	\$0.00	\$653.85
11/14/2016 I 01	943549	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.94	TN	0.00	\$0.00	\$807.30	\$0.00	\$807.30
11/30/2016 I 01	944181	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	17.04	TN	0.00	\$0.00	\$766.80	\$0.00	\$766.80
11/30/2016 I 01	944190	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	15.33	TN	0.00	\$0.00	\$689.85	\$0.00	\$689.85
11/30/2016 I 01	944196	015233 - Cowlitz Clean Sweep	55 L&D	SW-CONT SOIL W/FUI	9.48	TN	0.00	\$0.00	\$426.60	\$0.00	\$426.60
Tickets Reported: 119 Items Reported: 119									Contract Totals:	\$88,675.20	\$88,675.20

Material Summary	Weight		Volume		Count		Billing Quantity
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
VH - SW-CONT SOIL W/FUEL	1,970.56	0.00	0.00	0.00	0.00	0.00	1,970.56 TN



Tickets Reported:	119	Items Reported:	119
-------------------	-----	-----------------	-----



must be legibly filled in, in Ink Indelible Pencil, or in Carbon, and retained by the agent

Carrier No.

Date _____

MACHINE VACUUM SERVICE, INC.

Page ____ of ____

(Name of carrier)

(SCAC)

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.

TO: **MARINE VACUUM SERVICE, INC**

Street 1516 S. GRAHAM ST.

City SEATTLE State WA Zip Code 98108

FROM: WILKEY'S QENS

Street 3280 S.W. ALMON WAY

City Seattle State WA Zip Code 98101

24 hr. Emergency Contact Tel. No. **800-540-7491**

Route

Vehicle
Number[illegible]

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."

(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.

(3) Commodities requiring special or additional care or attention in handling or stowage must be so marked and packaged as to ensure safe transportation. See Section 2(a) of Item 362, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

Thereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/picarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT
C.O.D. TO:
ADDRESS

COD

Am: S

C.O.D. FEE:
PREPAID ☐
COLLECT ☐ \$

TOTAL CHARGES	\$
---------------	----

FREIGHT CHARGES
FREIGHT PREPAID except when box at left is checked ☐ **Check box if charges are to be collected**

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of the Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to de-

ination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

• Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

CARRIER MARINE VACUUM SERVICE, INC.

PER

PER

DATE _____

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

STORAGE TANK

CERTIFICATE OF DESTRUCTION

DATE: 10/12/2016

TANK OWNER: 7-11

TANK LOCATION: 3280 SW AVALON WAY - SEATTLE

TANK DESCRIPTION: (3) 10,000 GALLON UST

LAST CONTENTS HELD IN TANKS: GASOLINE

Marine Vacuum Service, Inc certifies that the tank mentioned above was pumped of all liquid materials and washed clean with a high-pressure washer and soap solution. The tank and contents therein have been disposed of according to all Local, State and Federal Regulations.

Thank you,

Marine Vacuum Service, Inc.

DBE # D4M0002341

SDVO

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # M4M002341

**APPENDIX D
ECOLOGY'S PERMANENT CLOSURE
NOTICE
AND
SITE CHECK/SITE ASSESSMENT CHECKLIST**



PERMANENT CLOSURE NOTICE

FOR UNDERGROUND STORAGE TANKS

UST ID #: 8604
County: King

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

I. UST FACILITY			II. OWNER/OPERATOR INFORMATION			
Facility Compliance Tag #:			Owner/Operator Name: 7-Eleven Inc.			
UST ID #: 8604			Business Name:			
Site Name: 7-Eleven 22561			Address: P.O. Box 711			
Site Address: 3280 SW Avalon Way			City: Dallas	State: TX	Zip: 75221	
City: Seattle			Phone: 214-415-0416			
Phone: 206-935-1477			Email: Marc.Westfall@7-11.com			
III. CERTIFIED UST DECOMMISSIONER						
Company Name: Wilkey's Construction Inc.			Service Provider Name: Dale Adams			
Address: 4557 Skyway Drive			Certification Type: UST Decommissioner			
City: Olivehurst	State: CA	Zip: 95961	Cert. No.: 8188560	Exp. Date: 02/26/2017		
Provider Phone: 530-741-2233			Provider Email: dale@wilkeysconstruction.com			
Provider Signature: <i>Dale Adams</i>			Date: 11/03/16			
IV. TANK INFORMATION						
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
NOL2	12,000 gallons	Unleaded Gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/12/16
REG1	12,000 gallons	Unleaded Gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/12/16
SNL3	12,000 gallons	Unleaded Gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/12/16
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. REQUIRED SIGNATURE						
<i>Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Permanent Closure Requirements.</i>						
11/3/16	<i>Andrea Schweiter</i>			Andrea Schweiter		
Date	Signature of Tank Owner/Operator or Authorized Representative			Print or Type Name		

PERMANENT CLOSURE NOTICE FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This form must be completed and submitted **within thirty days of completing** permanent closure activities to the following address:

Dept. of Ecology
UST Section
PO Box 47655
Olympia, WA 98504-7655

- I./II. UST Facility and Owner/Operator:** Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number. If all tanks at the site are permanently closed, the facility compliance tag must be returned with this notice.
- III. UST Decommissioner:** It is the responsibility of the ICC-certified Decommissioner to follow proper tank closure procedures in accordance with WAC 173-360-375. The Decommissioner signature certifies these procedures were followed.
- IV. Tank Information:** Use the same Tank IDs that are listed on the facility's Business License. List the last substance stored in each tank, the tank sizes, the method by which the tank is being closed, and the date closure activities were conducted. All closure methods require a site assessment be conducted in accordance with Ecology's *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*.
- V. Required Signature:** The owner and/or operator's signature is required. Also, the owner and/or operator is responsible for reporting confirmed releases to Ecology within 24 hours.

All confirmed releases must be reported to Ecology by the owner immediately and by service providers within 72 hours of the discovery of the condition. If the owner or operator is not immediately available, the report should be made directly to Ecology.

Be sure to contact your local fire marshal and other local jurisdictions. They may have other codes and regulations that apply to a permanent tank closure.

Further questions? Please contact your regional office below and ask for a tank inspector to assist you.

Regional Office

Central (509) 575-2490

Eastern (509) 329-3400

HQ (360) 407-7170

Northwest (425) 649-7000

Southwest (360) 407-6300

Counties Served

Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima

Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman

Federal facilities in Western Washington

Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

or find a complete list of UST inspectors at:
www.ecy.wa.gov/programs/tcp/ust-lust/people.html



SITE CHECK/SITE ASSESSMENT CHECKLIST FOR UNDERGROUND STORAGE TANKS

UST ID #: 8604County: King

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION	
Facility Compliance Tag #:		Owner/Operator Name:	<u>7-Eleven Inc.</u>
UST ID #:	<u>8604</u>	Business Name:	<u>7-Eleven</u>
Site Name:	<u>7-Eleven Store 22561</u>	Address:	<u>P.O. Box 711</u>
Site Address:	<u>3280 SW Avalon Way</u>	City:	<u>Dallas</u>
City:	<u>Seattle</u>	State:	<u>TX</u>
Phone:	<u>206-935-1477</u>	Zip:	<u>75221</u>
		Phone:	<u>214-415-0416</u>
		Email:	<u>Marc.Westfall@7-11.com</u>
III. CERTIFIED SITE ASSESSOR			
Service Provider Name:	<u>Andrea Schweiter</u>	Company Name:	<u>Stantec Consulting</u>
Cell Phone:	<u>206-779-5035</u>	Email:	<u>andrea.schweiter@stantec.com</u>
		Address:	<u>11130 NE 33rd Pl Ste. 200</u>
Certification #:	<u>8199671</u>	Exp. Date:	<u>3/6/17</u>
		City:	<u>Bellevue</u>
		State:	<u>WA</u>
		Zip:	<u>98004</u>
IV. TANK INFORMATION			
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
<u>NOL 2</u>	<u>12,000 gallon</u>	<u>unleaded gasoline</u>	<u>10/12/16</u>
<u>REG 1</u>	<u>12,000 gallon</u>	<u>unleaded gasoline</u>	<u>10/12/16</u>
<u>SNL 3</u>	<u>12,000 gallon</u>	<u>unleaded gasoline</u>	<u>10/12/16</u>
V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)			
<input checked="" type="checkbox"/> Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).			
<input type="checkbox"/> Release investigation following a failed tank and/or line tightness test.			
<input type="checkbox"/> Release investigation following discovery of contaminated soil and/or groundwater.			
<input type="checkbox"/> Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.			
<input type="checkbox"/> UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).			
<input type="checkbox"/> Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.			
<input type="checkbox"/> Other (describe):			

VI. CHECKLIST		
<p>The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication <i>Guidance for Site Checks and Site Assessments for Underground Storage Tanks.</i></p>		YES NO
1. The location of the UST site is shown on a vicinity map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A summary of UST system data is provided (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. The soils characteristics at the UST site are described. (Section 5.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Is there any apparent groundwater in the tank excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. A brief description of the surrounding land use is provided. (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• If applicable, groundwater samples are distinguished from soil samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Location of samples collected from stockpiled excavated soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Tank and piping locations and limits of excavation pit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Adjacent structures and streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Approximate locations of any on-site and nearby utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Any factors that may have compromised the quality of the data or validity of the results are described.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. REQUIRED SIGNATURES		
Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through -395.		
Andrea Schweiter	Andrea Schweiter	11/3/16
Print or Type Name	Signature of Certified Site Assessor	Date

APPENDIX E

PHOTOGRAPHIC RECORD

STANTEC CONSULTING SERVICES INC.
PHOTOGRAPHIC RECORD

Client: 7-Eleven, Inc.

Job Number: 185750386

Site Name: 7-Eleven, Inc. Store No. 22561

Photographer: Andrea Schweiter

PHOTO No. 1



Breaking Ground for UST Removal

PHOTO No. 2



Removal of Eastern-most UST

STANTEC CONSULTING SERVICES INC.
PHOTOGRAPHIC RECORD

Client: 7-Eleven, Inc.

Job Number: 185750386

Site Name: 7-Eleven, Inc. Store No. 22561

Photographer: Andrea Schweiter

PHOTO No. 3



Removal Center UST

PHOTO No. 4



Removal of Western-most UST

**STANTEC CONSULTING SERVICES INC.
PHOTOGRAPHIC RECORD**

Client: 7-Eleven, Inc.

Job Number: 185750386

Site Name: 7-Eleven, Inc. Store No. 22561

Photographer: Andrea Schweiter

PHOTO No. 5



Water within UST Excavation

PHOTO No. 6



Collection of Dispenser Island and Product Line Soil Samples

STANTEC CONSULTING SERVICES INC.
PHOTOGRAPHIC RECORD

Client: 7-Eleven, Inc.

Job Number: 185750386

Site Name: 7-Eleven, Inc. Store No. 22561

Photographer: Andrea Schweiter

PHOTO No. 7



Installation of New USTs

APPENDIX F

LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 490-114011-1

Client Project/Site: 7-Eleven # 22561

For:

Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
10/21/2016 3:11:31 PM

Heather Wagner, Project Manager I
(615)301-5763

heather.wagner@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	12
QC Association	19
Chronicle	22
Method Summary	25
Certification Summary	26
Chain of Custody	27
Receipt Checklists	29

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-114011-1	N-SW-8.5'	Solid	10/12/16 14:30	10/14/16 09:40
490-114011-2	E-SW-8.5'	Solid	10/12/16 14:25	10/14/16 09:40
490-114011-3	S-SW-8.5'	Solid	10/12/16 15:05	10/14/16 09:40
490-114011-4	W-SW-8.5'	Solid	10/12/16 14:45	10/14/16 09:40

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Job ID: 490-114011-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-114011-1

Comments

No additional comments.

Receipt

The samples were received on 10/14/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

GC/MS VOA

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

GC/MS Semi VOA

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

GC VOA

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

GC Semi VOA

Method 8015 NWTPH-Dx: Silica gel cleanup was performed during sample extraction.

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

Metals

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

Organic Prep

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

VOA Prep

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

Job ID: 490-114011-2

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-114011-2

Comments

No additional comments.

Receipt

The samples were received on 10/14/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D SIM: The continuing calibration verification (CCV) associated with batch 490-378519 recovered above the upper control limit for 1-Methylnaphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 490-378519/2).

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Job ID: 490-114011-2 (Continued)

Laboratory: TestAmerica Nashville (Continued)

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

GC VOA

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

GC Semi VOA

Method(s) NWTPH-Dx: The following samples contained an unidentified mixture of hydrocarbons: S-SW-8.5' (490-114011-3) and (490-114011-B-3-E DU). No match was identified in the laboratory's reference library.

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

Metals

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

Organic Prep

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

VOA Prep

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

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: N-SW-8.5'

Date Collected: 10/12/16 14:30

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-1

Matrix: Solid

Percent Solids: 92.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
Toluene	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
Ethylbenzene	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
Xylenes, Total	ND		0.00250		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
Methyl tert-butyl ether	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
1,2-Dichloroethane	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1
1,2-Dibromoethane (EDB)	ND		0.000833		mg/Kg	☼	10/12/16 16:30	10/15/16 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 130	10/12/16 16:30	10/15/16 00:30	1
4-Bromofluorobenzene (Surr)	97		70 - 130	10/12/16 16:30	10/15/16 00:30	1
Dibromofluoromethane (Surr)	115		70 - 130	10/12/16 16:30	10/15/16 00:30	1
Toluene-d8 (Surr)	99		70 - 130	10/12/16 16:30	10/15/16 00:30	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00354		mg/Kg	☼	10/18/16 11:50	10/20/16 18:38	1
2-Methylnaphthalene	ND		0.00354		mg/Kg	☼	10/18/16 11:50	10/20/16 18:38	1
Naphthalene	ND		0.00354		mg/Kg	☼	10/18/16 11:50	10/20/16 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	73		29 - 120	10/18/16 11:50	10/20/16 18:38	1
Nitrobenzene-d5	52		27 - 120	10/18/16 11:50	10/20/16 18:38	1
Terphenyl-d14	73		13 - 120	10/18/16 11:50	10/20/16 18:38	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.91		mg/Kg	☼	10/12/16 16:30	10/14/16 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		50 - 150	10/12/16 16:30	10/14/16 16:29	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.26		mg/Kg	☼	10/18/16 12:58	10/19/16 11:36	1
Motor Oil Range Organics (C24-C40)	ND		4.26		mg/Kg	☼	10/18/16 12:58	10/19/16 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	90		50 - 150	10/18/16 12:58	10/19/16 11:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.61		1.09		mg/Kg	☼	10/17/16 15:42	10/17/16 23:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.0		0.1		%	-		10/16/16 11:55	1

TestAmerica Nashville

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: E-SW-8.5'

Date Collected: 10/12/16 14:25

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-2

Matrix: Solid

Percent Solids: 89.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00129		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
Toluene	0.0173		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
Ethylbenzene	0.00176		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
Xylenes, Total	0.0103		0.00284		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
Methyl tert-butyl ether	ND		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
1,2-Dichloroethane	ND		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1
1,2-Dibromoethane (EDB)	ND		0.000947		mg/Kg	☼	10/12/16 16:25	10/15/16 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		70 - 130	10/12/16 16:25	10/15/16 00:57	1
4-Bromofluorobenzene (Surr)	97		70 - 130	10/12/16 16:25	10/15/16 00:57	1
Dibromofluoromethane (Surr)	115		70 - 130	10/12/16 16:25	10/15/16 00:57	1
Toluene-d8 (Surr)	97		70 - 130	10/12/16 16:25	10/15/16 00:57	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00359		mg/Kg	☼	10/18/16 11:50	10/20/16 18:57	1
2-Methylnaphthalene	ND		0.00359		mg/Kg	☼	10/18/16 11:50	10/20/16 18:57	1
Naphthalene	ND		0.00359		mg/Kg	☼	10/18/16 11:50	10/20/16 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	54		29 - 120	10/18/16 11:50	10/20/16 18:57	1
Nitrobenzene-d5	37		27 - 120	10/18/16 11:50	10/20/16 18:57	1
Terphenyl-d14	54		13 - 120	10/18/16 11:50	10/20/16 18:57	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.45		mg/Kg	☼	10/12/16 16:25	10/14/16 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		50 - 150	10/12/16 16:25	10/14/16 17:02	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.43		mg/Kg	☼	10/18/16 12:58	10/19/16 12:11	1
Motor Oil Range Organics (C24-C40)	ND		4.43		mg/Kg	☼	10/18/16 12:58	10/19/16 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150	10/18/16 12:58	10/19/16 12:11	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.89		1.07		mg/Kg	☼	10/17/16 15:42	10/17/16 23:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.8		0.1		%	-		10/16/16 11:55	1

TestAmerica Nashville

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: S-SW-8.5'

Date Collected: 10/12/16 15:05

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-3

Matrix: Solid

Percent Solids: 90.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
Toluene	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
Ethylbenzene	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
Xylenes, Total	ND		0.00244		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
Methyl tert-butyl ether	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
1,2-Dichloroethane	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1
1,2-Dibromoethane (EDB)	ND		0.000814		mg/Kg	☼	10/12/16 17:05	10/15/16 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 130	10/12/16 17:05	10/15/16 01:25	1
4-Bromofluorobenzene (Surr)	98		70 - 130	10/12/16 17:05	10/15/16 01:25	1
Dibromofluoromethane (Surr)	113		70 - 130	10/12/16 17:05	10/15/16 01:25	1
Toluene-d8 (Surr)	98		70 - 130	10/12/16 17:05	10/15/16 01:25	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00355		mg/Kg	☼	10/14/16 14:51	10/15/16 19:18	1
2-Methylnaphthalene	ND		0.00355		mg/Kg	☼	10/14/16 14:51	10/15/16 19:18	1
Naphthalene	ND		0.00355		mg/Kg	☼	10/14/16 14:51	10/15/16 19:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	43		29 - 120	10/14/16 14:51	10/15/16 19:18	1
Nitrobenzene-d5	40		27 - 120	10/14/16 14:51	10/15/16 19:18	1
Terphenyl-d14	71		13 - 120	10/14/16 14:51	10/15/16 19:18	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.77		mg/Kg	☼	10/12/16 17:05	10/14/16 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		50 - 150	10/12/16 17:05	10/14/16 17:35	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	5.83		5.30		mg/Kg	☼	10/14/16 15:20	10/17/16 15:17	1
Motor Oil Range Organics (C24-C40)	9.47		5.30		mg/Kg	☼	10/14/16 15:20	10/17/16 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	103		50 - 150	10/14/16 15:20	10/17/16 15:17	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.20		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Barium	26.8		2.20		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Cadmium	ND		1.10		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Chromium	24.4		1.10		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Silver	ND		1.10		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Lead	2.29		1.10		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1
Selenium	ND		2.20		mg/Kg	☼	10/14/16 15:49	10/15/16 02:10	1

TestAmerica Nashville

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: S-SW-8.5'

Date Collected: 10/12/16 15:05

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-3

Matrix: Solid

Percent Solids: 90.4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.106		mg/Kg	☼	10/14/16 13:05	10/17/16 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.4		0.1		%	—		10/16/16 11:55	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: W-SW-8.5'

Date Collected: 10/12/16 14:45

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-4

Matrix: Solid

Percent Solids: 91.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
Toluene	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
Ethylbenzene	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
Xylenes, Total	ND		0.00292		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
Methyl tert-butyl ether	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
1,2-Dichloroethane	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1
1,2-Dibromoethane (EDB)	ND		0.000973		mg/Kg	☼	10/12/16 16:45	10/15/16 01:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		70 - 130	10/12/16 16:45	10/15/16 01:52	1
4-Bromofluorobenzene (Surr)	99		70 - 130	10/12/16 16:45	10/15/16 01:52	1
Dibromofluoromethane (Surr)	116		70 - 130	10/12/16 16:45	10/15/16 01:52	1
Toluene-d8 (Surr)	97		70 - 130	10/12/16 16:45	10/15/16 01:52	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00360		mg/Kg	☼	10/18/16 11:50	10/20/16 19:16	1
2-Methylnaphthalene	ND		0.00360		mg/Kg	☼	10/18/16 11:50	10/20/16 19:16	1
Naphthalene	ND		0.00360		mg/Kg	☼	10/18/16 11:50	10/20/16 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	80		29 - 120	10/18/16 11:50	10/20/16 19:16	1
Nitrobenzene-d5	60		27 - 120	10/18/16 11:50	10/20/16 19:16	1
Terphenyl-d14	83		13 - 120	10/18/16 11:50	10/20/16 19:16	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.55		mg/Kg	☼	10/12/16 16:45	10/14/16 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150	10/12/16 16:45	10/14/16 18:08	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.28		mg/Kg	☼	10/18/16 12:58	10/19/16 12:28	1
Motor Oil Range Organics (C24-C40)	ND		4.28		mg/Kg	☼	10/18/16 12:58	10/19/16 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	83		50 - 150	10/18/16 12:58	10/19/16 12:28	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.66		1.08		mg/Kg	☼	10/17/16 15:42	10/17/16 23:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.3		0.1		%	-		10/16/16 11:55	1

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-378404/6

Matrix: Solid

Analysis Batch: 378404

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			10/15/16 00:02	1
Toluene	ND		0.00200		mg/Kg			10/15/16 00:02	1
Ethylbenzene	ND		0.00200		mg/Kg			10/15/16 00:02	1
Xylenes, Total	ND		0.00600		mg/Kg			10/15/16 00:02	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			10/15/16 00:02	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			10/15/16 00:02	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			10/15/16 00:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		97 - 107		1731/ 316 77:72	1
4-Bromofluorobenzene (Surr)	59		97 - 107		1731/ 316 77:72	1
Dibromofluoromethane (Surr)	116		97 - 107		1731/ 316 77:72	1
8oluene-dT (Surr)	5T		97 - 107		1731/ 316 77:72	1

Lab Sample ID: LCS 490-378404/3

Matrix: Solid

Analysis Batch: 378404

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04760		mg/Kg		95	70 - 130
Toluene	0.0500	0.04800		mg/Kg		96	70 - 130
Ethylbenzene	0.0500	0.04828		mg/Kg		97	70 - 130
Xylenes, Total	0.100	0.09809		mg/Kg		98	70 - 130
Methyl tert-butyl ether	0.0500	0.04981		mg/Kg		100	54 - 145
1,2-Dichloroethane	0.0500	0.05871		mg/Kg		117	65 - 134
1,2-Dibromoethane (EDB)	0.0500	0.05055		mg/Kg		101	69 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	119		97 - 107
4-Bromofluorobenzene (Surr)	5/		97 - 107
Dibromofluoromethane (Surr)	114		97 - 107
8oluene-dT (Surr)	5T		97 - 107

Lab Sample ID: LCSD 490-378404/4

Matrix: Solid

Analysis Batch: 378404

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04722		mg/Kg		94	70 - 130	1	37
Toluene	0.0500	0.04748		mg/Kg		95	70 - 130	1	40
Ethylbenzene	0.0500	0.04779		mg/Kg		96	70 - 130	1	38
Xylenes, Total	0.100	0.09711		mg/Kg		97	70 - 130	1	38
Methyl tert-butyl ether	0.0500	0.04976		mg/Kg		100	54 - 145	0	36
1,2-Dichloroethane	0.0500	0.05789		mg/Kg		116	65 - 134	1	16
1,2-Dibromoethane (EDB)	0.0500	0.05026		mg/Kg		101	69 - 130	1	17

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

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

Lab Sample ID: LCSD 490-378404/4

Matrix: Solid

Analysis Batch: 378404

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	116		97 - 107
4-Bromofluorobenzene (Surr)	59		97 - 107
Dibromofluoromethane (Surr)	11/		97 - 107
8oluene-dT (Surr)	5T		97 - 107

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-378339/1-A

Matrix: Solid

Analysis Batch: 378519

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 378339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00330		mg/Kg		10/14/16 14:51	10/15/16 18:40	1
2-Methylnaphthalene	ND		0.00330		mg/Kg		10/14/16 14:51	10/15/16 18:40	1
Naphthalene	ND		0.00330		mg/Kg		10/14/16 14:51	10/15/16 18:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	/ 5		25 - 127	173/ 43/ 6 14:/ 1	173/ 3/ 6 1T:47	1
Nitrobenzene-d/	62		29 - 127	173/ 43/ 6 14:/ 1	173/ 3/ 6 1T:47	1
8erphenyl-d14	6T		10 - 127	173/ 43/ 6 14:/ 1	173/ 3/ 6 1T:47	1

Lab Sample ID: LCS 490-378339/2-A

Matrix: Solid

Analysis Batch: 378519

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 378339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	0.0333	0.02369		mg/Kg		71	32 - 120
2-Methylnaphthalene	0.0333	0.02435		mg/Kg		73	28 - 120
Naphthalene	0.0333	0.01982		mg/Kg		59	32 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	/ 5		25 - 127
Nitrobenzene-d/	61		29 - 127
8erphenyl-d14	6T		10 - 127

Lab Sample ID: 490-114011-3 MS

Matrix: Solid

Analysis Batch: 378519

Client Sample ID: S-SW-8.5'

Prep Type: Total/NA

Prep Batch: 378339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	ND		0.0363	0.02559		mg/Kg	☼	70	10 - 120
2-Methylnaphthalene	ND		0.0363	0.02421		mg/Kg	☼	67	13 - 120
Naphthalene	ND		0.0363	0.02085		mg/Kg	☼	57	10 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	/ 6		25 - 127
Nitrobenzene-d/	/ T		29 - 127

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 490-114011-3 MS

Matrix: Solid

Analysis Batch: 378519

Client Sample ID: S-SW-8.5'

Prep Type: Total/NA

Prep Batch: 378339

Surrogate	MS %Recovery	MS Qualifier	Limits
8erphenyl-d14	94		10 - 127

Lab Sample ID: 490-114011-3 MSD

Matrix: Solid

Analysis Batch: 378519

Client Sample ID: S-SW-8.5'

Prep Type: Total/NA

Prep Batch: 378339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		0.0368	0.02603		mg/Kg	☼	71	10 - 120	2	50
2-Methylnaphthalene	ND		0.0368	0.02662		mg/Kg	☼	72	13 - 120	9	50
Naphthalene	ND		0.0368	0.02125		mg/Kg	☼	58	10 - 120	2	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	61		25 - 127
Nitrobenzene-d/	62		29 - 127
8erphenyl-d14	70		10 - 127

Lab Sample ID: MB 490-379140/1-A

Matrix: Solid

Analysis Batch: 379798

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 379140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00330		mg/Kg		10/18/16 11:50	10/20/16 15:24	1
2-Methylnaphthalene	ND		0.00330		mg/Kg		10/18/16 11:50	10/20/16 15:24	1
Naphthalene	ND		0.00330		mg/Kg		10/18/16 11:50	10/20/16 15:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		25 - 127	1731 T316 11:/7	17327316 1/ :24	1
Nitrobenzene-d/	61		29 - 127	1731 T316 11:/7	17327316 1/ :24	1
8erphenyl-d14	99		10 - 127	1731 T316 11:/7	17327316 1/ :24	1

Lab Sample ID: LCS 490-379140/2-A

Matrix: Solid

Analysis Batch: 379798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 379140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.0333	0.01881		mg/Kg		56	32 - 120
2-Methylnaphthalene	0.0333	0.01652		mg/Kg		50	28 - 120
Naphthalene	0.0333	0.02085		mg/Kg		63	32 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	92		25 - 127
Nitrobenzene-d/	/ 6		29 - 127
8erphenyl-d14	65		10 - 127

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 490-378230/8

Matrix: Solid

Analysis Batch: 378230

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			10/14/16 15:56	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-8rifluorotoluene	179		/ 7 - 1/ 7					173/43/16 1/ : 6	1

Lab Sample ID: LCS 490-378230/5

Matrix: Solid

Analysis Batch: 378230

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	500	562.7		mg/Kg		113	70 - 130		
Surrogate	%Recovery	LCS Qualifier	Limits						
a,a,a-8rifluorotoluene	105		/ 7 - 1/ 7						

Lab Sample ID: LCSD 490-378230/6

Matrix: Solid

Analysis Batch: 378230

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	500	546.6		mg/Kg		109	70 - 130	3	10
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-8rifluorotoluene	107		/ 7 - 1/ 7						

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 490-378355/1-A

Matrix: Solid

Analysis Batch: 378811

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 378355

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		5.00		mg/Kg		10/14/16 15:20	10/17/16 14:41	1
Motor Oil Range Organics (C24-C40)	ND		5.00		mg/Kg		10/14/16 15:20	10/17/16 14:41	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-8erphenyl	111		/ 7 - 1/ 7				173/43/16 1/ : 27	173/93/16 14:41	1

Lab Sample ID: LCS 490-378355/2-A

Matrix: Solid

Analysis Batch: 378811

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 378355

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
#2 Diesel (C10-C24)	50.0	44.59		mg/Kg		89	55 - 129		

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: LCS 490-378355/2-A
Matrix: Solid
Analysis Batch: 378811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378355

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-8erphenyl	172		/ 7 - 1/ 7

Lab Sample ID: 490-114011-3 DU
Matrix: Solid
Analysis Batch: 378811

Client Sample ID: S-SW-8.5'
Prep Type: Total/NA
Prep Batch: 378355

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	5.83		8.468		mg/Kg	☼	37	50
Motor Oil Range Organics (C24-C40)	9.47		10.25		mg/Kg	☼	8	50

Surrogate	DU %Recovery	DU Qualifier	Limits
o-8erphenyl	171		/ 7 - 1/ 7

Lab Sample ID: MB 490-379166/1-A
Matrix: Solid
Analysis Batch: 379344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 379166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.00		mg/Kg		10/18/16 12:58	10/19/16 11:02	1
Motor Oil Range Organics (C24-C40)	ND		4.00		mg/Kg		10/18/16 12:58	10/19/16 11:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-8erphenyl	56		/ 7 - 1/ 7	1731 T316 12: / T	17315316 11:72	1

Lab Sample ID: LCS 490-379166/2-A
Matrix: Solid
Analysis Batch: 379344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 379166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	40.0	25.70		mg/Kg		64	55 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-8erphenyl	57		/ 7 - 1/ 7

Lab Sample ID: 490-114011-1 DU
Matrix: Solid
Analysis Batch: 379344

Client Sample ID: N-SW-8.5'
Prep Type: Total/NA
Prep Batch: 379166

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	☼	NC	50
Motor Oil Range Organics (C24-C40)	ND		ND		mg/Kg	☼	8	50

Surrogate	DU %Recovery	DU Qualifier	Limits
o-8erphenyl	T9		/ 7 - 1/ 7

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-378374/1-A
Matrix: Solid
Analysis Batch: 378502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.94		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Barium	ND		1.94		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Cadmium	ND		0.971		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Chromium	ND		0.971		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Silver	ND		0.971		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Lead	ND		0.971		mg/Kg		10/14/16 15:49	10/15/16 00:53	1
Selenium	ND		1.94		mg/Kg		10/14/16 15:49	10/15/16 00:53	1

Lab Sample ID: LCS 490-378374/16-A
Matrix: Solid
Analysis Batch: 378502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Silver	19.9	21.31		mg/Kg		107	80 - 120

Lab Sample ID: LCS 490-378374/2-A
Matrix: Solid
Analysis Batch: 378502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	19.7	17.64		mg/Kg		90	80 - 120
Barium	787	745.5		mg/Kg		95	80 - 120
Cadmium	19.7	18.80		mg/Kg		96	80 - 120
Chromium	78.7	82.13		mg/Kg		104	80 - 120
Lead	19.7	19.57		mg/Kg		99	80 - 120
Selenium	19.7	17.97		mg/Kg		91	80 - 120

Lab Sample ID: MB 490-378917/1-A
Matrix: Solid
Analysis Batch: 379082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.998		mg/Kg		10/17/16 15:42	10/17/16 21:33	1

Lab Sample ID: LCS 490-378917/2-A
Matrix: Solid
Analysis Batch: 379082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	19.1	18.49		mg/Kg		97	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 490-378234/1-A
Matrix: Solid
Analysis Batch: 378798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0960		mg/Kg		10/14/16 11:52	10/17/16 09:32	1

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Lab Sample ID: LCS 490-378234/2-A
Matrix: Solid
Analysis Batch: 378798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378234
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.160	0.1414		mg/Kg		88	80 - 120

Lab Sample ID: LCSD 490-378234/3-A
Matrix: Solid
Analysis Batch: 378798

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 378234
%Rec.

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.160	0.1496		mg/Kg		94	80 - 120	6	20

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

GC/MS VOA

Prep Batch: 378305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	5035	
490-114011-2	E-SW-8.5'	Total/NA	Solid	5035	
490-114011-3	S-SW-8.5'	Total/NA	Solid	5035	
490-114011-4	W-SW-8.5'	Total/NA	Solid	5035	

Analysis Batch: 378404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	8260C	378305
490-114011-2	E-SW-8.5'	Total/NA	Solid	8260C	378305
490-114011-3	S-SW-8.5'	Total/NA	Solid	8260C	378305
490-114011-4	W-SW-8.5'	Total/NA	Solid	8260C	378305
MB 490-378404/6	Method Blank	Total/NA	Solid	8260C	
LCS 490-378404/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 490-378404/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC/MS Semi VOA

Prep Batch: 378339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	3550C	
MB 490-378339/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-378339/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-114011-3 MS	S-SW-8.5'	Total/NA	Solid	3550C	
490-114011-3 MSD	S-SW-8.5'	Total/NA	Solid	3550C	

Analysis Batch: 378519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	8270D SIM	378339
MB 490-378339/1-A	Method Blank	Total/NA	Solid	8270D SIM	378339
LCS 490-378339/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	378339
490-114011-3 MS	S-SW-8.5'	Total/NA	Solid	8270D SIM	378339
490-114011-3 MSD	S-SW-8.5'	Total/NA	Solid	8270D SIM	378339

Prep Batch: 379140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	3550C	
490-114011-2	E-SW-8.5'	Total/NA	Solid	3550C	
490-114011-4	W-SW-8.5'	Total/NA	Solid	3550C	
MB 490-379140/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-379140/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 379798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	8270D SIM	379140
490-114011-2	E-SW-8.5'	Total/NA	Solid	8270D SIM	379140
490-114011-4	W-SW-8.5'	Total/NA	Solid	8270D SIM	379140
MB 490-379140/1-A	Method Blank	Total/NA	Solid	8270D SIM	379140
LCS 490-379140/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	379140

TestAmerica Nashville

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

GC VOA

Analysis Batch: 378230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	NWTPH-Gx	378303
490-114011-2	E-SW-8.5'	Total/NA	Solid	NWTPH-Gx	378303
490-114011-3	S-SW-8.5'	Total/NA	Solid	NWTPH-Gx	378303
490-114011-4	W-SW-8.5'	Total/NA	Solid	NWTPH-Gx	378303
MB 490-378230/8	Method Blank	Total/NA	Solid	NWTPH-Gx	
LCS 490-378230/5	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
LCSD 490-378230/6	Lab Control Sample Dup	Total/NA	Solid	NWTPH-Gx	

Prep Batch: 378303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	5035	
490-114011-2	E-SW-8.5'	Total/NA	Solid	5035	
490-114011-3	S-SW-8.5'	Total/NA	Solid	5035	
490-114011-4	W-SW-8.5'	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 378355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	3550B	
MB 490-378355/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-378355/2-A	Lab Control Sample	Total/NA	Solid	3550C	
490-114011-3 DU	S-SW-8.5'	Total/NA	Solid	3550B	

Analysis Batch: 378811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	NWTPH-Dx	378355
MB 490-378355/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	378355
LCS 490-378355/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	378355
490-114011-3 DU	S-SW-8.5'	Total/NA	Solid	NWTPH-Dx	378355

Prep Batch: 379166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	3550B	
490-114011-2	E-SW-8.5'	Total/NA	Solid	3550B	
490-114011-4	W-SW-8.5'	Total/NA	Solid	3550B	
MB 490-379166/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 490-379166/2-A	Lab Control Sample	Total/NA	Solid	3550B	
490-114011-1 DU	N-SW-8.5'	Total/NA	Solid	3550B	

Analysis Batch: 379344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	NWTPH-Dx	379166
490-114011-2	E-SW-8.5'	Total/NA	Solid	NWTPH-Dx	379166
490-114011-4	W-SW-8.5'	Total/NA	Solid	NWTPH-Dx	379166
MB 490-379166/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	379166
LCS 490-379166/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	379166
490-114011-1 DU	N-SW-8.5'	Total/NA	Solid	NWTPH-Dx	379166

TestAmerica Nashville

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Metals

Prep Batch: 378234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	7471B	
MB 490-378234/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 490-378234/2-A	Lab Control Sample	Total/NA	Solid	7471B	
LCSD 490-378234/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	

Prep Batch: 378374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	3051A	
MB 490-378374/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 490-378374/16-A	Lab Control Sample	Total/NA	Solid	3051A	
LCS 490-378374/2-A	Lab Control Sample	Total/NA	Solid	3051A	

Analysis Batch: 378502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	6010C	378374
MB 490-378374/1-A	Method Blank	Total/NA	Solid	6010C	378374
LCS 490-378374/16-A	Lab Control Sample	Total/NA	Solid	6010C	378374
LCS 490-378374/2-A	Lab Control Sample	Total/NA	Solid	6010C	378374

Analysis Batch: 378798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-3	S-SW-8.5'	Total/NA	Solid	7471B	378234
MB 490-378234/1-A	Method Blank	Total/NA	Solid	7471B	378234
LCS 490-378234/2-A	Lab Control Sample	Total/NA	Solid	7471B	378234
LCSD 490-378234/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	378234

Prep Batch: 378917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	3051A	
490-114011-2	E-SW-8.5'	Total/NA	Solid	3051A	
490-114011-4	W-SW-8.5'	Total/NA	Solid	3051A	
MB 490-378917/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 490-378917/2-A	Lab Control Sample	Total/NA	Solid	3051A	

Analysis Batch: 379082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	6010C	378917
490-114011-2	E-SW-8.5'	Total/NA	Solid	6010C	378917
490-114011-4	W-SW-8.5'	Total/NA	Solid	6010C	378917
MB 490-378917/1-A	Method Blank	Total/NA	Solid	6010C	378917
LCS 490-378917/2-A	Lab Control Sample	Total/NA	Solid	6010C	378917

General Chemistry

Analysis Batch: 378573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114011-1	N-SW-8.5'	Total/NA	Solid	Moisture	
490-114011-2	E-SW-8.5'	Total/NA	Solid	Moisture	
490-114011-3	S-SW-8.5'	Total/NA	Solid	Moisture	
490-114011-4	W-SW-8.5'	Total/NA	Solid	Moisture	

TestAmerica Nashville

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: N-SW-8.5'

Date Collected: 10/12/16 14:30

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-1

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	Moisture		1			378573	10/16/16 11:55	BAA	TAL NSH

Client Sample ID: N-SW-8.5'

Date Collected: 10/12/16 14:30

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-1

Matrix: Solid

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13.047 g	5.0 mL	378305	10/12/16 16:30	JLP	TAL NSH
Total/NA	Analysis	8260C		1	5 g	5 mL	378404	10/15/16 00:30	EML	TAL NSH
Total/NA	Prep	3550C			30.35 g	1.00 mL	379140	10/18/16 11:50	LOJ	TAL NSH
Total/NA	Analysis	8270D SIM		1			379798	10/20/16 18:38	WDS	TAL NSH
Total/NA	Prep	5035			10.95 g	5.0 mL	378303	10/12/16 16:30	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	378230	10/14/16 16:29	AK1	TAL NSH
Total/NA	Prep	3550B			25.49 g	1.00 mL	379166	10/18/16 12:58	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			379344	10/19/16 11:36	KRL	TAL NSH
Total/NA	Prep	3051A			0.499 g	100 mL	378917	10/17/16 15:42	PG1	TAL NSH
Total/NA	Analysis	6010C		1			379082	10/17/16 23:01	RDF	TAL NSH

Client Sample ID: E-SW-8.5'

Date Collected: 10/12/16 14:25

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-2

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	Moisture		1			378573	10/16/16 11:55	BAA	TAL NSH

Client Sample ID: E-SW-8.5'

Date Collected: 10/12/16 14:25

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-2

Matrix: Solid

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11.759 g	5.0 mL	378305	10/12/16 16:25	JLP	TAL NSH
Total/NA	Analysis	8260C		1	5 g	5 mL	378404	10/15/16 00:57	EML	TAL NSH
Total/NA	Prep	3550C			30.69 g	1.00 mL	379140	10/18/16 11:50	LOJ	TAL NSH
Total/NA	Analysis	8270D SIM		1			379798	10/20/16 18:57	WDS	TAL NSH
Total/NA	Prep	5035			14.746 g	5.0 mL	378303	10/12/16 16:25	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	378230	10/14/16 17:02	AK1	TAL NSH
Total/NA	Prep	3550B			25.13 g	1.00 mL	379166	10/18/16 12:58	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			379344	10/19/16 12:11	KRL	TAL NSH
Total/NA	Prep	3051A			0.518 g	100 mL	378917	10/17/16 15:42	PG1	TAL NSH
Total/NA	Analysis	6010C		1			379082	10/17/16 23:06	RDF	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Client Sample ID: S-SW-8.5'

Date Collected: 10/12/16 15:05

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-3

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	Moisture		1			378573	10/16/16 11:55	BAA	TAL NSH

Client Sample ID: S-SW-8.5'

Date Collected: 10/12/16 15:05

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-3

Matrix: Solid

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13.584 g	5.0 mL	378305	10/12/16 17:05	JLP	TAL NSH
Total/NA	Analysis	8260C		1	5 g	5 mL	378404	10/15/16 01:25	EML	TAL NSH
Total/NA	Prep	3550C			30.88 g	1.00 mL	378339	10/14/16 14:51	LOJ	TAL NSH
Total/NA	Analysis	8270D SIM		1			378519	10/15/16 19:18	T1C	TAL NSH
Total/NA	Prep	5035			12.338 g	5.0 mL	378303	10/12/16 17:05	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	378230	10/14/16 17:35	AK1	TAL NSH
Total/NA	Prep	3550B			20.87 g	1 mL	378355	10/14/16 15:20	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			378811	10/17/16 15:17	MDW	TAL NSH
Total/NA	Prep	3051A			0.502 g	100 mL	378374	10/14/16 15:49	PG1	TAL NSH
Total/NA	Analysis	6010C		1			378502	10/15/16 02:10	RDF	TAL NSH
Total/NA	Prep	7471B			0.625 g	100 mL	378234	10/14/16 13:05	LCS	TAL NSH
Total/NA	Analysis	7471B		1			378798	10/17/16 11:04	LCS	TAL NSH

Client Sample ID: W-SW-8.5'

Date Collected: 10/12/16 14:45

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-4

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	Moisture		1			378573	10/16/16 11:55	BAA	TAL NSH

Client Sample ID: W-SW-8.5'

Date Collected: 10/12/16 14:45

Date Received: 10/14/16 09:40

Lab Sample ID: 490-114011-4

Matrix: Solid

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11.264 g	5.0 mL	378305	10/12/16 16:45	JLP	TAL NSH
Total/NA	Analysis	8260C		1	5 g	5 mL	378404	10/15/16 01:52	EML	TAL NSH
Total/NA	Prep	3550C			30.15 g	1.00 mL	379140	10/18/16 11:50	LOJ	TAL NSH
Total/NA	Analysis	8270D SIM		1			379798	10/20/16 19:16	WDS	TAL NSH
Total/NA	Prep	5035			13.24 g	5.0 mL	378303	10/12/16 16:45	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	378230	10/14/16 18:08	AK1	TAL NSH
Total/NA	Prep	3550B			25.62 g	1.00 mL	379166	10/18/16 12:58	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			379344	10/19/16 12:28	KRL	TAL NSH
Total/NA	Prep	3051A			0.507 g	100 mL	378917	10/17/16 15:42	PG1	TAL NSH
Total/NA	Analysis	6010C		1			379082	10/17/16 23:11	RDF	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Laboratory References:

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

1
2
3
4
5
6
7
8
9
10
11
12
13

Method Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
7471B	Mercury (CVAA)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561

TestAmerica Job ID: 490-114011-1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C789	07-19-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

COOLER RECEIPT FORM



490-114011 Chain of Custody

Cooler Received/Opened On 10/14/2016 @ 0940

Time Samples Removed From Cooler 1052 Time Samples Placed In Storage 1110 (2 Hour Window)

1. Tracking # 2304 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot HCS81117 Chlorine Strip Lot 060513C

2. Temperature of rep. sample or temp blank when opened: 1.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

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) EW

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

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) HG

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) HG

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) HG

I certify that I attached a label with the unique LIMS number to each container (initial) HG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..# _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

10/21/2016

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 490-114011-1

Login Number: 114011

List Number: 1

Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 490-115566-1
Client Project/Site: 7-Eleven #22561

For:

Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
11/11/2016 4:36:18 PM

Heather Wagner, Project Manager I
(615)301-5763
heather.wagner@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	10
QC Association	15
Chronicle	17
Method Summary	19
Certification Summary	20
Chain of Custody	21
Receipt Checklists	23

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-115566-1	DI-1-4'	Solid	11/03/16 14:40	11/05/16 09:15
490-115566-2	DI-2-4'	Solid	11/03/16 14:45	11/05/16 09:15
490-115566-3	PL-1-4'	Solid	11/03/16 14:50	11/05/16 09:15
490-115566-4	PL-2-4'	Solid	11/03/16 15:00	11/05/16 09:15

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Job ID: 490-115566-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-115566-1

Comments

No additional comments.

Receipt

The samples were received on 11/5/2016 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D SIM: The method blank for preparation batch 490-384499 contained 1-Methylnaphthalene, 2-Methylnaphthalene and Naphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

GC VOA

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

GC Semi VOA

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

Metals

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

Organic Prep

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

VOA Prep

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

Definitions/Glossary

TestAmerica Job ID: 490-11001 -1

n Seut: g taute n ousp\$u. n orPj
/ ro7ectEite: v-#32eu 566Q 1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to describe the response is reported on a dry weight basis
%R	/ Percent Recovery
nFL	Final Free Lipid
nNF	Final Free Lipid
D#R	Percent error ratio (unnormalized absolute difference)
DisFac	Discrepancy Factor
DL, RA, R#, IN	Indicates a Discrepancy, Re-analysis, Re-extraction, or additional Suitability Analysis of the sample
DLn	Decision Concentration
MDA	Minimum detectable activity
#DL	Estimated Detection Limit
MDn	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Lead (Dioxin)
Nn	Not analyzed
ND	Not detected at the reported limit (or MDL or #DL if shown)
/ QL	/ Relative Quantitation Limit
Qn	Quality Control
R#R	Relative error ratio
RL	Reported Limit or Requested Limit (Radiochemistry)
R/ D	Relative Difference, a measure of the relative difference between two points
T#F	Toxicity #2 Factor (Dioxin)
T#Q	Toxicity #2 Quotient (Dioxin)

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Client Sample ID: DI-1-4'
Date Collected: 11/03/16 14:40
Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-1
Matrix: Solid
Percent Solids: 86.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
Toluene	0.00412		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
Ethylbenzene	0.00698		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
Xylenes, Total	0.0286		0.00268		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
Methyl tert-butyl ether	ND		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
1,2-Dichloroethane	ND		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1
1,2-Dibromoethane (EDB)	ND		0.000893		mg/Kg	☼	11/03/16 16:40	11/11/16 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		97 - 107	11/03/16 16:40	11/11/16 05:32	1
4-5roB ortuorof enbene (Surr)	17		97 - 107	11/03/16 16:40	11/11/16 05:32	1
Dif roB ortuoroB ethane (Surr)	117		97 - 107	11/03/16 16:40	11/11/16 05:32	1
zoluene-dT (Surr)	170		97 - 107	11/03/16 16:40	11/11/16 05:32	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		3.85		mg/Kg	☼	11/03/16 16:40	11/07/16 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-z rirtuorotoluene	87		: 7 - 1: 7	11/03/16 16:40	11/07/16 19:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.6		0.1		%	-		11/07/16 13:12	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Client Sample ID: DI-2-4'

Date Collected: 11/03/16 14:45

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-2

Matrix: Solid

Percent Solids: 91.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
Toluene	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
Ethylbenzene	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
Xylenes, Total	ND		0.00271		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
Methyl tert-butyl ether	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
1,2-Dichloroethane	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1
1,2-Dibromoethane (EDB)	ND		0.000902		mg/Kg	☼	11/03/16 16:45	11/11/16 05:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		97 - 107	11/30/16 1/64	11/31/16 7: 6 8	1
4-5roB ortuorof enbene (Surr)	179		97 - 107	11/30/16 1/64	11/31/16 7: 6 8	1
Dif roB ortuoroB ethane (Surr)	178		97 - 107	11/30/16 1/64	11/31/16 7: 6 8	1
zoluene-dT (Surr)	17:		97 - 107	11/30/16 1/64	11/31/16 7: 6 8	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.78		mg/Kg	☼	11/03/16 16:45	11/07/16 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-zirrtuorotoluene	80		: 7 - 1: 7	11/30/16 1/64	11/39/16 186:	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.1		0.1		%	-		11/07/16 14:02	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Client Sample ID: PL-1-4'
Date Collected: 11/03/16 14:50
Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-3
Matrix: Solid
Percent Solids: 85.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0107		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
Toluene	0.135		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
Ethylbenzene	0.0182		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
Xylenes, Total	0.0959		0.00294		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
Methyl tert-butyl ether	ND		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
1,2-Dichloroethane	ND		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1
1,2-Dibromoethane (EDB)	ND		0.000981		mg/Kg	☼	11/03/16 16:50	11/11/16 09:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	11		97 - 107	11/3/16 1/6 7	11/3/16 7808	1
4-5roB ortuorof enbene (Surr)	8		97 - 107	11/3/16 1/6 7	11/3/16 7808	1
Dif roB ortuoroB ethane (Surr)	178		97 - 107	11/3/16 1/6 7	11/3/16 7808	1
zoluene-dT (Surr)	172		97 - 107	11/3/16 1/6 7	11/3/16 7808	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00378		mg/Kg	☼	11/06/16 16:34	11/07/16 16:08	1
2-Methylnaphthalene	ND		0.00378		mg/Kg	☼	11/06/16 16:34	11/07/16 16:08	1
Naphthalene	ND		0.00378		mg/Kg	☼	11/06/16 16:34	11/07/16 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorof iphenyl (Surr)	84		28 - 127	11/3/16 1/6 7	11/3/16 7808	1
Nitrof enbene-d:	: 0		29 - 127	11/3/16 1/6 7	11/3/16 7808	1
zerphenyl-d14	78		10 - 127	11/3/16 1/6 7	11/3/16 7808	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		3.27		mg/Kg	☼	11/03/16 16:50	11/07/16 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-zrituorotoluene	89		: 7 - 1: 7	11/3/16 1/6 7	11/3/16 2701	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.66		mg/Kg	☼	11/06/16 16:31	11/08/16 13:52	1
Motor Oil Range Organics (C24-C40)	ND		4.66		mg/Kg	☼	11/06/16 16:31	11/08/16 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-zerphenyl	92		: 7 - 1: 7	11/3/16 1/6 7	11/3/16 106 2	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.55		1.17		mg/Kg	☼	11/08/16 10:06	11/08/16 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.1		0.1		%	-		11/07/16 14:02	1

TestAmerica Nashville

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Client Sample ID: PL-2-4'
Date Collected: 11/03/16 15:00
Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-4
Matrix: Solid
Percent Solids: 87.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
Toluene	0.00142		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
Ethylbenzene	ND		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
Xylenes, Total	ND		0.00287		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
Methyl tert-butyl ether	ND		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
1,2-Dichloroethane	ND		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1
1,2-Dibromoethane (EDB)	ND		0.000957		mg/Kg	☼	11/03/16 17:00	11/11/16 10:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		97 - 107	11/03/16 17:00	11/11/16 10:06	1
4-5roB ortuorof enbene (Surr)	177		97 - 107	11/03/16 17:00	11/11/16 10:06	1
Dif roB ortuoroB ethane (Surr)	112		97 - 107	11/03/16 17:00	11/11/16 10:06	1
zoluene-dT (Surr)	170		97 - 107	11/03/16 17:00	11/11/16 10:06	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		3.24		mg/Kg	☼	11/03/16 17:00	11/07/16 20:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-zirrtuorotoluene	8:		: 7 - 1: 7	11/03/16 17:00	11/07/16 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87.8		0.1		%	-		11/07/16 14:02	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-387xx4/x
MatriP: Solid
Fnlalysis Batch: 387xx4

Client Sample ID: Method Blank
Trep Nype: Notal/AF

Fnllyte	MB Result	MB Qualifier	RL	MDL	f nit	D	Trepared	FnllyUed	Dil zac
Benzene	ND		0.00200		mg/Kg			11/11/16 03:14	1
Toluene	ND		0.00200		mg/Kg			11/11/16 03:14	1
Ethylbenzene	ND		0.00200		mg/Kg			11/11/16 03:14	1
Xylenes, Total	ND		0.00600		mg/Kg			11/11/16 03:14	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			11/11/16 03:14	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			11/11/16 03:14	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			11/11/16 03:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		79 - 109		11/11/16 03:14	1
4- ro5 oBloromene (Surr)	111		79 - 109		11/11/16 03:14	1
Dimro5 oBuro5 ethane (Surr)	112		79 - 109		11/11/16 03:14	1
boluene-dz (Surr)	191		79 - 109		11/11/16 03:14	1

Lab Sample ID: LCS 490-387xx4/4
MatriP: Solid
Fnlalysis Batch: 387xx4

Client Sample ID: Lab Control Sample
Trep Nype: Notal/AF

Fnllyte	Spike Fdded	LCS Result	LCS Qualifier	f nit	D	. Rec	. Rec(Limits
Benzene	0.0500	0.05461		mg/Kg		109	70 - 130
Toluene	0.0500	0.05692		mg/Kg		114	70 - 130
Ethylbenzene	0.0500	0.05581		mg/Kg		112	70 - 130
Xylenes, Total	0.100	0.1105		mg/Kg		110	70 - 130
Methyl tert-butyl ether	0.0500	0.05749		mg/Kg		115	54 - 145
1,2-Dichloroethane	0.0500	0.06562		mg/Kg		131	65 - 134
1,2-Dibromoethane (EDB)	0.0500	0.05604		mg/Kg		112	69 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	11/		79 - 109
4- ro5 oBloromene (Surr)	197		79 - 109
Dimro5 oBuro5 ethane (Surr)	110		79 - 109
boluene-dz (Surr)	190		79 - 109

Lab Sample ID: LCSD 490-387xx4/7
MatriP: Solid
Fnlalysis Batch: 387xx4

Client Sample ID: Lab Control Sample Dup
Trep Nype: Notal/AF

Fnllyte	Spike Fdded	LCSD Result	LCSD Qualifier	f nit	D	. Rec	. Rec(Limits	RTD	RTD Limit
Benzene	0.0500	0.05500		mg/Kg		110	70 - 130	1	37
Toluene	0.0500	0.05692		mg/Kg		114	70 - 130	0	40
Ethylbenzene	0.0500	0.05675		mg/Kg		113	70 - 130	2	38
Xylenes, Total	0.100	0.1112		mg/Kg		111	70 - 130	1	38
Methyl tert-butyl ether	0.0500	0.05722		mg/Kg		114	54 - 145	0	36
1,2-Dichloroethane	0.0500	0.06550		mg/Kg		131	65 - 134	0	16
1,2-Dibromoethane (EDB)	0.0500	0.05538		mg/Kg		111	69 - 130	1	17

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method: 8260C - Volatile Organic Compounds by GC/MS)Continuedv

Lab Sample ID: LCSD 490-387xx4/7

MatriP: Solid

Fnalysis Batch: 387xx4

Client Sample ID: Lab Control Sample Dup

Trep Nype: Notal/AF

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	122		79 - 109
4- ro5 oBfluoromene (Surr)	19z		79 - 109
Dimro5 oBfluoro5 ethane (Surr)	114		79 - 109
boluene-dz (Surr)	190		79 - 109

Method: 82x0D SIM - Semi1olatile Organic Compounds)GC/MS SIMv

Lab Sample ID: MB 490-384499/5-F

MatriP: Solid

Fnalysis Batch: 384742

Client Sample ID: Method Blank

Trep Nype: Notal/AF

Trep Batch: 384499

Falyte	MB Result	MB Qualifier	RL	MDL	f nit	D	Trepared	Fnalysed	Dil zac
1-Methylnaphthalene	0.02466		0.00330		mg/Kg		11/06/16 16:34	11/07/16 15:27	1
2-Methylnaphthalene	0.03466		0.00330		mg/Kg		11/06/16 16:34	11/07/16 15:27	1
Naphthalene	0.004463		0.00330		mg/Kg		11/06/16 16:34	11/07/16 15:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Tluorom8henFI (Surr)	z2		2p - 129	11/3/31/ 1/ 04	11/3731/ 1y027	1
Nitromenf ene-dy	y1		27 - 129	11/3/31/ 1/ 04	11/3731/ 1y027	1
ber8henFI-d14	74		10 - 129	11/3/31/ 1/ 04	11/3731/ 1y027	1

Lab Sample ID: LCS 490-384499/2-F

MatriP: Solid

Fnalysis Batch: 384742

Client Sample ID: Lab Control Sample

Trep Nype: Notal/AF

Trep Batch: 384499

Falyte	Spike Fdded	LCS Result	LCS Qualifier	f nit	D	. Rec	. Rec(Limits
1-Methylnaphthalene	0.0333	0.03076		mg/Kg		92		32 - 120
2-Methylnaphthalene	0.0333	0.03342		mg/Kg		100		28 - 120
Naphthalene	0.0333	0.03203		mg/Kg		96		32 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Tluorom8henFI (Surr)	190		2p - 129
Nitromenf ene-dy	/ 0		27 - 129
ber8henFI-d14	p/		10 - 129

Lab Sample ID: 490-557766-3 MS

MatriP: Solid

Fnalysis Batch: 384742

Client Sample ID: TL-5-4W

Trep Nype: Notal/AF

Trep Batch: 384499

Falyte	Sample Result	Sample Qualifier	Spike Fdded	MS Result	MS Qualifier	f nit	D	. Rec	. Rec(Limits
1-Methylnaphthalene	ND		0.0391	0.03103		mg/Kg	☼	79		10 - 120
2-Methylnaphthalene	ND		0.0391	0.03270		mg/Kg	☼	84		13 - 120
Naphthalene	ND		0.0391	0.03132		mg/Kg	☼	80		10 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Tluorom8henFI (Surr)	p9		2p - 129
Nitromenf ene-dy	y0		27 - 129

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method: 82x0D SIM - SemiVolatile Organic Compounds)GC/MS SIMv)Continuedv

Lab Sample ID: 490-557766-3 MS
MatriP: Solid
Fnlalysis Batch: 384742

Client Sample ID: TL-5-4W
Trep Nype: Notal/AF
Trep Batch: 384499

Surrogate	MS %Recovery	MS Qualifier	Limits
ber8henFI-d14	zz		10 - 129

Lab Sample ID: 490-557766-3 MSD
MatriP: Solid
Fnlalysis Batch: 384742

Client Sample ID: TL-5-4W
Trep Nype: Notal/AF
Trep Batch: 384499

F nalyte	Sample Result	Sample Quali%er	Spike Fdded	MSD Result	MSD Quali%er	f nit	D	. Rec	. Rec(Limits	RTD	Limit
1-Methylnaphthalene	ND		0.0385	0.03264		mg/Kg	☼	85	10 - 120	5	50
2-Methylnaphthalene	ND		0.0385	0.03475		mg/Kg	☼	90	13 - 120	6	50
Naphthalene	ND		0.0385	0.03292		mg/Kg	☼	85	10 - 120	5	50
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
2-Tluoroni8henFI (Surr)	190		2p - 129								
Nitronenf ene-dy	/ 1		27 - 129								
ber8henFI-d14	pp		10 - 129								

Method: A' NTH-GP - Aorthwest - Volatile Tetroleum Troducts)GCv

Lab Sample ID: MB 490-384602/8
MatriP: Solid
Fnlalysis Batch: 384602

Client Sample ID: Method Blank
Trep Nype: Notal/AF

F nalyte	MB Result	MB Quali%er	RL	MDL	f nit	D	Tprepared	F nalyUed	Dil zac
C6-C12	ND		5.00		mg/Kg			11/07/16 14:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-bri8uorotoluene	zz		y9 - 1y9					11/07/16 14:45	1

Lab Sample ID: LCS 490-384602/7
MatriP: Solid
Fnlalysis Batch: 384602

Client Sample ID: Lab Control Sample
Trep Nype: Notal/AF

			Spike	LCS	LCS			. Rec(
F nalyte			Fdded	Result	Quali%er	f nit	D	. Rec	Limits	
C6-C12			500	503.8		mg/Kg		101	70 - 130	
Surrogate	LCS	LCS								
	%Recovery	Qualifier	Limits							
a.a.a-bri8uorotoluene	199		y9 - 1y9							

Lab Sample ID: LCSD 490-384602/6
MatriP: Solid
Fnlalysis Batch: 384602

Client Sample ID: Lab Control Sample Dup
Trep Nype: Notal/AF

F nalyte	Spike Fdded	LCSD Result	LCSD Quali%er	f nit	D	. Rec	. Rec(Limits	RTD	Limit
C6-C12	500	514.7		mg/Kg		103	70 - 130	2	10

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method: A' NTH-GP - Aorthwest - Volatile Tetroleum Troducts)GCv)Continuedv

Lab Sample ID: LCSD 490-384602/6
MatriP: Solid
Fnalysis Batch: 384602

Client Sample ID: Lab Control Sample Dup
Trep Nype: Notal/AF

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-briDuorotoluene	199		y9 - 1y9

Lab Sample ID: 490-557766-4 Df
MatriP: Solid
Fnalysis Batch: 384602

Client Sample ID: TL-2-4W
Trep Nype: Notal/AF
Trep Batch: 384655

Fnalysite	Sample Result	Sample Qualifier	Df Result	Df Qualifier	f nit mg/Kg	D	RTD Limit
C6-C12	ND		ND				NC 10
Surrogate	DU %Recovery	DU Qualifier	Limits				
a,a,a-briDuorotoluene	p0		y9 - 1y9				

Method: A' NTH-DP - Semi-Volatile Tetroleum Troducts by A' NTH with Silica Gel Cleanup

Lab Sample ID: MB 490-384498/5-F
MatriP: Solid
Fnalysis Batch: 384867

Client Sample ID: Method Blank
Trep Nype: Notal/AF
Trep Batch: 384498

Fnalysite	MB Result	MB Qualifier	RL	MDL	f nit mg/Kg	D	Tprepared	Fnalysed	Dil zac
#2 Diesel (C10-C24)	ND		4.00		mg/Kg		11/06/16 16:31	11/08/16 13:17	1
Motor Oil Range Organics (C24-C40)	ND		4.00		mg/Kg		11/06/16 16:31	11/08/16 13:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
o-ber8henF	zp		y9 - 1y9						
							Prepared	Analyzed	Dil Fac
							11/3/ 3/ 1/ 01	11/3z3/ 10/ 7	1

Lab Sample ID: LCS 490-384498/2-F
MatriP: Solid
Fnalysis Batch: 384867

Client Sample ID: Lab Control Sample
Trep Nype: Notal/AF
Trep Batch: 384498

Fnalysite	Spike Fdded	LCS Result	LCS Qualifier	f nit mg/Kg	D	Rec	Rec Limits
#2 Diesel (C10-C24)	40.0	35.96		mg/Kg		90	55 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-ber8henF	71		y9 - 1y9				

Method: 6050C - Metals)ICTv

Lab Sample ID: MB 490-384876/5-F
MatriP: Solid
Fnalysis Batch: 387538

Client Sample ID: Method Blank
Trep Nype: Notal/AF
Trep Batch: 384876

Fnalysite	MB Result	MB Qualifier	RL	MDL	f nit mg/Kg	D	Tprepared	Fnalysed	Dil zac
Lead	ND		0.990		mg/Kg		11/08/16 10:06	11/08/16 14:24	1

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method: 6050C - Metals)ICTv)Continuedv

Lab Sample ID: LCS 490-384876/2-F
MatriP: Solid
Fnalysis Batch: 387538

Client Sample ID: Lab Control Sample
Trep Nype: Notal/AF
Trep Batch: 384876

Fnalyste	Spike Fdded	LCS Result	LCS Quali%er	f nit	D	. Rec	. Rec(Limits
Lead	19.2	19.14		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 490-384876/3-F
MatriP: Solid
Fnalysis Batch: 387538

Client Sample ID: Lab Control Sample Dup
Trep Nype: Notal/AF
Trep Batch: 384876

Fnalyste	Spike Fdded	LCSD Result	LCSD Quali%er	f nit	D	. Rec	. Rec(Limits	RTD Limit
Lead	19.7	20.04		mg/Kg		102	80 - 120	5 20

Lab Sample ID: 490-557766-3 MS
MatriP: Solid
Fnalysis Batch: 387538

Client Sample ID: TL-5-4W
Trep Nype: Notal/AF
Trep Batch: 384876

Fnalyste	Sample Result	Sample Quali%er	Spike Fdded	MS Result	MS Quali%er	f nit	D	. Rec	. Rec(Limits
Lead	4.55		23.4	27.05		mg/Kg	✱	96	75 - 125

Lab Sample ID: 490-557766-3 MSD
MatriP: Solid
Fnalysis Batch: 387538

Client Sample ID: TL-5-4W
Trep Nype: Notal/AF
Trep Batch: 384876

Fnalyste	Sample Result	Sample Quali%er	Spike Fdded	MSD Result	MSD Quali%er	f nit	D	. Rec	. Rec(Limits	RTD Limit
Lead	4.55		22.7	26.42		mg/Kg	✱	96	75 - 125	2 20

Method: Moisture - Tercent Moisture

Lab Sample ID: 490-557766-2 Df
MatriP: Solid
Fnalysis Batch: 384678

Client Sample ID: DI-2-4W
Trep Nype: Notal/AF

Fnalyste	Sample Result	Sample Quali%er	Df Result	Df Quali%er	f nit	D	. Rec	. Rec(Limits	RTD Limit
Percent Solids	91.1		91.1		%				0.08 20

TestAmerica Nashville

QC Association Summary

Seut: g taute n ousp\$u. n orPj
/ roectEgite: v-# 32eu 566Q 1

TestAmerica Job ID: 490-110Q I -1

GC/MS VOA

Prep Batch: 384618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -1	DI-1-4N	Total	go\$	003C	
490-110Q I -6	DI-6-4N	Total	go\$	003C	
490-110Q I -3	/ 8-1-4N	Total	go\$	003C	
490-110Q I -4	/ 8-6-4N	Total	go\$	003C	

Analysis Batch: 385774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -1	DI-1-4N	Total	go\$	' 6l On	3' 4l 1'
490-110Q I -6	DI-6-4N	Total	go\$	' 6l On	3' 4l 1'
490-110Q I -3	/ 8-1-4N	Total	go\$	' 6l On	3' 4l 1'
490-110Q I -4	/ 8-6-4N	Total	go\$	' 6l On	3' 4l 1'
MB 490-3' Cvv4E	Method B\$uk	Total	go\$	' 6l On	
8ng 490-3' Cvv4E	8ab n outroSgamP\$	Total	go\$	' 6l On	
8ngD 490-3' Cvv4E	8ab n outroSgamP\$ DpP	Total	go\$	' 6l On	

GC/MS Semi VOA

Prep Batch: 384499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	go\$	3000n	
MB 490-3' 4499E-A	Method B\$uk	Total	go\$	3000n	
8ng 490-3' 4499E-A	8ab n outroSgamP\$	Total	go\$	3000n	
490-110Q I -3 Mg	/ 8-1-4N	Total	go\$	3000n	
490-110Q I -3 MgD	/ 8-1-4N	Total	go\$	3000n	

Analysis Batch: 384542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	go\$	' 6v0D gIM	3' 4499
MB 490-3' 4499E-A	Method B\$uk	Total	go\$	' 6v0D gIM	3' 4499
8ng 490-3' 4499E-A	8ab n outroSgamP\$	Total	go\$	' 6v0D gIM	3' 4499
490-110Q I -3 Mg	/ 8-1-4N	Total	go\$	' 6v0D gIM	3' 4499
490-110Q I -3 MgD	/ 8-1-4N	Total	go\$	' 6v0D gIM	3' 4499

GC VOA

Analysis Batch: 384602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -1	DI-1-4N	Total	go\$	WL T/ H-Gx	3' 4l 11
490-110Q I -6	DI-6-4N	Total	go\$	WL T/ H-Gx	3' 4l 11
490-110Q I -3	/ 8-1-4N	Total	go\$	WL T/ H-Gx	3' 4l 11
490-110Q I -4	/ 8-6-4N	Total	go\$	WL T/ H-Gx	3' 4l 11
MB 490-3' 4l 06E	Method B\$uk	Total	go\$	WL T/ H-Gx	
8ng 490-3' 4l 06E	8ab n outroSgamP\$	Total	go\$	WL T/ H-Gx	
8ngD 490-3' 4l 06E	8ab n outroSgamP\$ DpP	Total	go\$	WL T/ H-Gx	
490-110Q I -4 DU	/ 8-6-4N	Total	go\$	WL T/ H-Gx	3' 4l 11

Prep Batch: 384611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -1	DI-1-4N	Total	go\$	003C	
490-110Q I -6	DI-6-4N	Total	go\$	003C	

TestAmerica Wash2i\$

QC Association Summary

Seut: g taute n ousp\$u. n orPj
/ roectgite: v-#2eu 566Q 1

TestAmerica Job ID: 490-110Q I -1

GC VOA (Continued)

Prep Batch: 384611 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	goSd	003C	
490-110Q I -4	/ 8-6-4N	Total	goSd	003C	
490-110Q I -4 DU	/ 8-6-4N	Total	goSd	003C	

GC Semi VOA

Prep Batch: 384498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	goSd	3000B	
MB 490-3' 449' B-A	Method B3uk	Total	goSd	3000n	
8ng 490-3' 449' B-A	8ab n outroSgamP3	Total	goSd	3000n	

Analysis Batch: 384865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	goSd	WL T/ H-Dx	3' 449'
MB 490-3' 449' B-A	Method B3uk	Total	goSd	WL T/ H-Dx	3' 449'
8ng 490-3' 449' B-A	8ab n outroSgamP3	Total	goSd	WL T/ H-Dx	3' 449'

Metals

Prep Batch: 384856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	goSd	30C1A	
MB 490-3' 4' Q B-A	Method B3uk	Total	goSd	30C1A	
8ng 490-3' 4' Q B-A	8ab n outroSgamP3	Total	goSd	30C1A	
8ngD 490-3' 4' Q B-A	8ab n outroSgamP3 DpP	Total	goSd	30C1A	
490-110Q I -3 Mg	/ 8-1-4N	Total	goSd	30C1A	
490-110Q I -3 MgD	/ 8-1-4N	Total	goSd	30C1A	

Analysis Batch: 385138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -3	/ 8-1-4N	Total	goSd	I 010n	3' 4' Q
MB 490-3' 4' Q B-A	Method B3uk	Total	goSd	I 010n	3' 4' Q
8ng 490-3' 4' Q B-A	8ab n outroSgamP3	Total	goSd	I 010n	3' 4' Q
8ngD 490-3' 4' Q B-A	8ab n outroSgamP3 DpP	Total	goSd	I 010n	3' 4' Q
490-110Q I -3 Mg	/ 8-1-4N	Total	goSd	I 010n	3' 4' Q
490-110Q I -3 MgD	/ 8-1-4N	Total	goSd	I 010n	3' 4' Q

General Chemistry

Analysis Batch: 384648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -1	DI-1-4N	Total	goSd	Moistpre	

Analysis Batch: 384658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-110Q I -6	DI-6-4N	Total	goSd	Moistpre	
490-110Q I -3	/ 8-1-4N	Total	goSd	Moistpre	
490-110Q I -4	/ 8-6-4N	Total	goSd	Moistpre	
490-110Q I -6 DU	DI-6-4N	Total	goSd	Moistpre	

TestAmerica Wash2iS

Lab Chronicle

Client: Stantec Consulting Corp.
/ roectSite: v-#le2en 566Pj 1

TestAmerica Job ID: 490-11PPj j -1

Client Sample ID: DI-1-4'

Date Collected: 11/03/16 14:40

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	Analysis	Moisture		1			L84j 48	110v0j 1L:16	BAA	TANHS3

Client Sample ID: DI-1-4'

Date Collected: 11/03/16 14:40

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-1

Matrix: Solid

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	/ rep	POLP			16.941 g	P.0 mN	L84j 18	110L0j 1j :40	JN	TANHS3
Total HIA	Analysis	86j 0C		1	P g	P mN	L8Pvv4	11010j 0P:L6	#MN	TANHS3
Total HIA	/ rep	POLP			9.L9L g	P.0 mN	L84j 11	110L0j 1j :40	JN	TANHS3
Total HIA	Analysis	HOT/ 3-WG		1	0.1 mN	P mN	L84j 06	110v0j 19:1P	Dx 1	TANHS3

Client Sample ID: DI-2-4'

Date Collected: 11/03/16 14:45

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	Analysis	Moisture		1			L84j P8	110v0j 14:06	BAA	TANHS3

Client Sample ID: DI-2-4'

Date Collected: 11/03/16 14:45

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-2

Matrix: Solid

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	/ rep	POLP			16.1j 8 g	P.0 mN	L84j 18	110L0j 1j :4P	JN	TANHS3
Total HIA	Analysis	86j 0C		1	P g	P mN	L8Pvv4	11010j 0P:P9	#MN	TANHS3
Total HIA	/ rep	POLP			16.01j g	P.0 mN	L84j 11	110L0j 1j :4P	JN	TANHS3
Total HIA	Analysis	HOT/ 3-WG		1	0.1 mN	P mN	L84j 06	110v0j 19:4P	Dx 1	TANHS3

Client Sample ID: PL-1-4'

Date Collected: 11/03/16 14:50

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	Analysis	Moisture		1			L84j P8	110v0j 14:06	BAA	TANHS3

Client Sample ID: PL-1-4'

Date Collected: 11/03/16 14:50

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-3

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total HIA	/ rep	POLP			11.9v9 g	P.0 mN	L84j 18	110L0j 1j :P0	JN	TANHS3

TestAmerica Hask2ille

Lab Chronicle

Client: Stantec Consulting Corp.
/ roectSite: v-#le2en 566Pj 1

TestAmerica Job ID: 490-11PPj j -1

Client Sample ID: PL-1-4'

Date Collected: 11/03/16 14:50

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-3

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total H ₂ A	Analysis	86j 0C		1	P g	P mN	L8Pvv4	11B1Bj 09:L9	#MN	TANHS3
Total H ₂ A	/ rep	LPP0C			L0.8L g	1.00 mN	L84499	11Bj Bj 1j :L4	MHM	TANHS3
Total H ₂ A	Analysis	86v0D SIM		1			L84P46	11BvBj 1j :08	N#W	TANHS3
Total H ₂ A	/ rep	P0LP			16.L0P g	P.0 mN	L84j 11	11BLBj 1j :P0	JN	TANHS3
Total H ₂ A	Analysis	HO T/ 3-WG		1	0.1 mN	P mN	L84j 06	11BvBj 60:1P	Dx 1	TANHS3
Total H ₂ A	/ rep	LPP0B			6P.64 g	1.00 mN	L84498	11Bj Bj 1j :L1	MHM	TANHS3
Total H ₂ A	Analysis	HO T/ 3-DG		1			L848j P	11B8Bj 1L:P6	RFN	TANHS3
Total H ₂ A	/ rep	L0P1A			0.P04 g	100 mN	L848Pj	11B8Bj 10:0j	/ W1	TANHS3
Total H ₂ A	Analysis	j 010C		1			L8P1L8	11B8Bj 14:49	TSC	TANHS3

Client Sample ID: PL-2-4'

Date Collected: 11/03/16 15:00

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total H ₂ A	Analysis	Moisture		1			L84j P8	11BvBj 14:06	BAA	TANHS3

Client Sample ID: PL-2-4'

Date Collected: 11/03/16 15:00

Date Received: 11/05/16 09:15

Lab Sample ID: 490-115566-4

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total H ₂ A	/ rep	P0LP			11.894 g	P.0 mN	L84j 18	11BLBj 1v:00	JN	TANHS3
Total H ₂ A	Analysis	86j 0C		1	P g	P mN	L8Pvv4	11B1Bj 10:0j	#MN	TANHS3
Total H ₂ A	/ rep	P0LP			11.1P9 g	P.0 mN	L84j 11	11BLBj 1v:00	JN	TANHS3
Total H ₂ A	Analysis	HO T/ 3-WG		1	0.1 mN	P mN	L84j 06	11BvBj 60:4P	Dx 1	TANHS3

Laboratory References:

TANHS3 h TestAmerica HaskZille=69j 0 , oster CreigKton Dri2e=HaskZille=TH Lv604=T#N(j 1P)v6j -01vv

Method Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven #22561

TestAmerica Job ID: 490-115566-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Certification Summary

Client: Stantec Consulting Corp.
/ roectSite: v-#le2en 566Pj 1

TestAmerica Job ID: 490-11PPj j -1

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were co2ered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State / rogram	10	Cv89	0v-19-1v

The following analytes are included in this report, but certification is not offered by the go2erning authority:

Analysis Method	/ rep Method	Matrix	Analyte
Moisture		Solid	/ ercent Solids

COOLER RECEIPT FORM



490-115566 Chain of Custody

Cooler Received/Opened On 11/5/2016 @ 0915

Time Samples Removed From Cooler 11:24

Time Samples Placed In Storage 1350 (2 Hour Window)

1. Tracking # 4751 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 31470368 pH Strip Lot HC581117 Chlorine Strip Lot 061316 ✓

2. Temperature of rep. sample or temp blank when opened: 1.1 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? YES...NO...NA

If yes, how many and where: 0 Front

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) ms

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 NO Plastic bag NO 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

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) ms 11/5/16

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) ms

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) ms

I certify that I attached a label with the unique LIMS number to each container (initial) ms

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES...NO...#

Chain of Custody Record

Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Client Information

Client Contact:
Paul Fairbairn

Sampler:
Andrea Schweiter
Phone: (425) 289-7362

Lab PM:
Wagner, Heather
E-Mail: heather.wagner@testamericainc.com

Carrier Tracking No(s):

Company:
Stanlec Consulting Corp.

Address:
11130 NE 33rd Place Suite 200

City:
Bellevue

State, Zip:
WA, 98004-1465

Phone:
425-298-1000(Tel)

Email:
paul.fairbairn@stanlec.com

Project Name:
7-Eleven #22561

Site:
22561 ~~Associated~~ Avalon

Due Date Requested:

IAI Requested (days):

PO #:

Purchase Order Requested

WO #:

Project #:

SSOW#:

Analysis Requested

Loc: 490
115566

Preservation Codes:

- A - HCL
- B - NaOH
- C - 2n Acetate
- D - Nitric Acid
- E - NaHSO4
- F - MeOH
- G - Amchlor
- H - Ascorbic Acid
- I - Ice
- J - DI Water
- K - EDTA
- L - EDA
- Other:
- M - Hexane
- N - None
- O - AsNaO2
- P - Na2O4S
- Q - Na2SO3
- R - Na2S2O3
- S - H2SO4
- T - TSP Dodecahydride
- U - Acetone
- V - MCAA
- W - ph 4-5
- Z - other (Specify)

Sample Identification

Sample Date

Sample Time

Sample Type (C=Contd, G=Grab)

Matrix (Wet, Solid, Overst, Oil, Breisture, Aash)

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

NWTPH-Gx

BTEx, MTBE, EDB, EDC (8260)

NWTPH-Dx

Naphthalene, 1-methyl naphthalene, 2-methyl naphthalene (8270)

Total Lead

RCRA 8 Metals

Total Number of Containers

Special Instructions/Note:

Possible Hazard Identification

☐ Non-Hazard ☐ Immovable ☐ Irritant ☐ on B ☐ Udn ☐ Rod ☐ Biological

Deliverable Requested: I, II, III, IV, Other (Specify)

Empty Kit Relinquished by:

Date:

Time:

Method of Shipment:

Company

Relinquished by:
Andrea Schweiter

Date/Time:

11/4/16 1343

Company
Stanlec

Received by:

11/4/16 1550

Company
SEA 7A

Received by:

11/5/16 0915

Date/Time:

Company
11/5/16

Relinquished by:

Date/Time:

11/5/16 1550

Company
SEA 7A

Received by:

11/5/16 1550

Company
SEA 7A

Received by:

11/5/16 1550

Date/Time:

Company
SEA 7A

Custody Seals Intact:

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Δ Yes Δ No

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 490-115566-1

Login Number: 115566

List Number: 1

Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-114673-1

TestAmerica Sample Delivery Group: UST Pull/Replacement

Client Project/Site: 7-Eleven # 22561 - WA

For:

Stantec Consulting Corp.

11130 NE 33rd Place

Suite 200

Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:

10/31/2016 10:42:51 AM

Heather Wagner, Project Manager I

(615)301-5763

heather.wagner@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	7
QC Association	11
Chronicle	13
Method Summary	14
Certification Summary	15
Chain of Custody	16
Receipt Checklists	18

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-114673-1	Base-1-17'	Solid	10/19/16 13:20	10/22/16 09:00

1

2

3

4

5

6

7

8

9

10

11

12

13

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Job ID: 490-114673-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-114673-1

Comments

No additional comments.

Receipt

The sample was received on 10/22/2016 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

GC/MS VOA

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

GC/MS Semi VOA

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

GC VOA

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

GC Semi VOA

NWTPH-Dx: Silica gel treatment was performed during sample preparation.

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

Metals

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

Organic Prep

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

VOA Prep

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

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Client Sample ID: Base-1-17'

Date Collected: 10/19/16 13:20

Date Received: 10/22/16 09:00

Lab Sample ID: 490-114673-1

Matrix: Solid

Percent Solids: 92.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
Toluene	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
Ethylbenzene	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
Xylenes, Total	ND		0.00234		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
Methyl tert-butyl ether	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
1,2-Dichloroethane	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1
1,2-Dibromoethane (EDB)	ND		0.000780		mg/Kg	☼	10/19/16 15:20	10/27/16 07:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		97 - 107	173/1316 1:52	17329316 795 6	1
4-Bromofluorobenzene (Surr)	//		97 - 107	173/1316 1:52	17329316 795 6	1
Dibromofluoromethane (Surr)	11:		97 - 107	173/1316 1:52	17329316 795 6	1
Toluene-d8 (Surr)	/4		97 - 107	173/1316 1:52	17329316 795 6	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00319		mg/Kg	☼	10/25/16 14:40	10/26/16 12:30	1
2-Methylnaphthalene	ND		0.00319		mg/Kg	☼	10/25/16 14:40	10/26/16 12:30	1
Naphthalene	ND		0.00319		mg/Kg	☼	10/25/16 14:40	10/26/16 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	69		2/ - 127	1732:316 14547	17326316 12307	1
Nitrobenzene-d:	: 0		29 - 127	1732:316 14547	17326316 12307	1
Terphenyl-d14	90		10 - 127	1732:316 14547	17326316 12307	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		2.88		mg/Kg	☼	10/19/16 15:20	10/24/16 22:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	8/		: 7 - 1: 7	173/1316 1:52	17324316 2232:	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		3.77		mg/Kg	☼	10/25/16 15:29	10/26/16 16:46	1
Motor Oil Range Organics (C24-C40)	ND		3.77		mg/Kg	☼	10/25/16 15:29	10/26/16 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	97		: 7 - 1: 7	1732:316 1:52/	17326316 16346	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.1		0.1		%	-		10/24/16 14:32	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-387499/8

Matrix: Solid

Analysis Batch: 387499

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			10/27/16 00:35	1
Toluene	ND		0.00200		mg/Kg			10/27/16 00:35	1
Ethylbenzene	ND		0.00200		mg/Kg			10/27/16 00:35	1
Xylenes, Total	ND		0.00600		mg/Kg			10/27/16 00:35	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			10/27/16 00:35	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			10/27/16 00:35	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			10/27/16 00:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 130		10/27/16 00:35	1
4-Bromofluorobenzene (Surr)	101		70 - 130		10/27/16 00:35	1
Dibromofluoromethane (Surr)	109		70 - 130		10/27/16 00:35	1
Toluene-d8 (Surr)	93		70 - 130		10/27/16 00:35	1

Lab Sample ID: LCS 490-387499/4

Matrix: Solid

Analysis Batch: 387499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.06005		mg/Kg		120	70 - 130
Toluene	0.0500	0.06010		mg/Kg		120	70 - 130
Ethylbenzene	0.0500	0.06056		mg/Kg		121	70 - 130
Xylenes, Total	0.100	0.1190		mg/Kg		119	70 - 130
Methyl tert-butyl ether	0.0500	0.05554		mg/Kg		111	54 - 145
1,2-Dichloroethane	0.0500	0.05422		mg/Kg		108	65 - 134
1,2-Dibromoethane (EDB)	0.0500	0.05347		mg/Kg		107	69 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 490-387499/(

Matrix: Solid

Analysis Batch: 387499

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05887		mg/Kg		118	70 - 130	2	37
Toluene	0.0500	0.05871		mg/Kg		117	70 - 130	2	40
Ethylbenzene	0.0500	0.05996		mg/Kg		120	70 - 130	1	38
Xylenes, Total	0.100	0.1143		mg/Kg		114	70 - 130	4	38
Methyl tert-butyl ether	0.0500	0.05365		mg/Kg		107	54 - 145	3	36
1,2-Dichloroethane	0.0500	0.05292		mg/Kg		106	65 - 134	2	16
1,2-Dibromoethane (EDB)	0.0500	0.05312		mg/Kg		106	69 - 130	1	17

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Method: 8260C - Volatile Organic Compounds by GC/MS)Continuedv

Lab Sample ID: LCSD 490-387499/(
Matrix: Solid
Analysis Batch: 387499

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	92		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Method: 8210D SIM - Semi5olatile Organic Compounds)GC/MS SIMv

Lab Sample ID: MB 490-38704(/7-A
Matrix: Solid
Analysis Batch: 387326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38704(

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.00330		mg/Kg		10/25/16 14:40	10/26/16 11:52	1
2-Methylnaphthalene	ND		0.00330		mg/Kg		10/25/16 14:40	10/26/16 11:52	1
Naphthalene	ND		0.00330		mg/Kg		10/25/16 14:40	10/26/16 11:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		29 - 120				10/25/16 14:40	10/26/16 11:52	1
Nitrobenzene-d5	48		27 - 120				10/25/16 14:40	10/26/16 11:52	1
Terphenyl-d14	59		13 - 120				10/25/16 14:40	10/26/16 11:52	1

Lab Sample ID: LCS 490-38704(/2-A
Matrix: Solid
Analysis Batch: 387326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38704(

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	0.0333	0.02787		mg/Kg		84	32 - 120
2-Methylnaphthalene	0.0333	0.02334		mg/Kg		70	28 - 120
Naphthalene	0.0333	0.02886		mg/Kg		87	32 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2-Fluorobiphenyl (Surr)	99		29 - 120				
Nitrobenzene-d5	81		27 - 120				
Terphenyl-d14	84		13 - 120				

Method: NWTP' -Gx - NorthHest - Volatile Petroleum Products)GCv

Lab Sample ID: MB 490-380601/77
Matrix: Solid
Analysis Batch: 380601

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			10/24/16 17:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		50 - 150					10/24/16 17:24	1

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Method: NWTP' -Gx - NorthHest - Volatile Petroleum Products)GCv)Continuedv

Lab Sample ID: LCS 490-380601/8

Matrix: Solid

Analysis Batch: 380601

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Analyte			500	528.3		mg/Kg	-	106	70 - 130		
C6-C12											
Surrogate			LCS %Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene			105		50 - 150						

Lab Sample ID: LCSD 490-380601/9

Matrix: Solid

Analysis Batch: 380601

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Data: 000001											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			500	533.9		mg/Kg	-	107	70 - 130	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
a,a,a-Trifluorotoluene	104		50 - 150								

Method: NWTP' -Dx - Semi-Volatile Petroleum Products by NWTP' Hith Silica Gel Cleanup

Lab Sample ID: MB 490-387081/7-A

Matrix: Solid

Analysis Batch: 387208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 387081

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		4.00		mg/Kg		10/25/16 15:29	10/26/16 16:12	1
Motor Oil Range Organics (C24-C40)	ND		4.00		mg/Kg		10/25/16 15:29	10/26/16 16:12	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				10/25/16 15:29	10/26/16 16:12	1

Lab Sample ID: LCS 490-387081/2-A

Matrix: Solid

Analysis Batch: 387208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 387081

Analyte				Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)				40.0	32.75		mg/Kg	-	82	55 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits							
o-Terphenyl	79		50 - 150							

Lab Sample ID: 490-774613-7 DU

Matrix: Solid

Analysis Batch: 387208

Client Sample ID: Base-7-71w

Prep Type: Total/NA

Prep Batch: 387081

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	✖	NC	50
Motor Oil Range Organics (C24-C40)	ND		ND		mg/Kg	✖	NC	50

TestAmerica Nashville

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Method: NWTP' -Dx - Semi-Volatile Petroleum Products by NWTP' Hith Silica Gel Cleanup)Continuedv

Lab Sample ID: 490-774613-7 DU
Matrix: Solid
Analysis Batch: 387208

Client Sample ID: Base-7-71w
Prep Type: Total/NA
Prep Batch: 387081

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	62		50 - 150

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

GC/MS VOA

Prep Batch: 384641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	5035	

Analysis Batch: 385177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	8260C	380704
MB 490-381499/8	Method Blank	Total/NA	Solid	8260C	
LCS 490-381499/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 490-381499/5	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC/MS Semi VOA

Prep Batch: 385419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	3550C	
MB 490-381045/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-381045/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 385320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	8270D SIM	381045
MB 490-381045/1-A	Method Blank	Total/NA	Solid	8270D SIM	381045
LCS 490-381045/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	381045

GC VOA

Analysis Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	NWTPH-Gx	380684
MB 490-380607/11	Method Blank	Total/NA	Solid	NWTPH-Gx	
LCS 490-380607/8	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
LCSD 490-380607/9	Lab Control Sample Dup	Total/NA	Solid	NWTPH-Gx	

Prep Batch: 384081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 385486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	3550B	
MB 490-381087/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 490-381087/2-A	Lab Control Sample	Total/NA	Solid	3550B	
490-114673-1 DU	Base-1-17'	Total/NA	Solid	3550B	

Analysis Batch: 385248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	NWTPH-Dx	381087
MB 490-381087/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	381087
LCS 490-381087/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	381087

TestAmerica Nashville

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

GC Semi VOA (Continued)

Analysis Batch: 385248 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1 DU	Base-1-17'	Total/NA	Solid	NWTPH-Dx	381087

General Chemistry

Analysis Batch: 384070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-114673-1	Base-1-17'	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Client Sample ID: Base-1-17'

Date Collected: 10/19/16 13:20

Date Received: 10/22/16 09:00

Lab Sample ID: 490-114673-1

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	Moisture		1			380696	10/24/16 14:32	BAA	TAL NSH

Client Sample ID: Base-1-17'

Date Collected: 10/19/16 13:20

Date Received: 10/22/16 09:00

Lab Sample ID: 490-114673-1

Matrix: Solid

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13.922 g	5.0 mL	380704	10/19/16 15:20	JLP	TAL NSH
Total/NA	Analysis	8260C		1	5 g	5 mL	381499	10/27/16 07:56	TSC	TAL NSH
Total/NA	Prep	3550C			33.64 g	1.00 mL	381045	10/25/16 14:40	LOJ	TAL NSH
Total/NA	Analysis	8270D SIM		1			381326	10/26/16 12:30	WDS	TAL NSH
Total/NA	Prep	5035			11.064 g	5.0 mL	380684	10/19/16 15:20	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	380607	10/24/16 22:25	A1B	TAL NSH
Total/NA	Prep	3550B			28.81 g	1.00 mL	381087	10/25/16 15:29	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			381208	10/26/16 16:46	KRL	TAL NSH

Laboratory References:

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

Method Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - WA

TestAmerica Job ID: 490-114673-1
SDG: UST Pull/Replacement

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C789	07-19-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM



Cooler Received/Opened On 10/22/2016 @ 0900

Time Samples Removed From Cooler 1900 Time Samples Placed In Storage 1945 (2 Hour Window)

1. Tracking # 3756 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 17960358 pH Strip Lot HCS8117 Chlorine Strip Lot 06/116W

2. Temperature of rep. sample or temp blank when opened: 0.3 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? YES...NO...NA

If yes, how many and where: 1 (Front)

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) KD

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

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # PN1

I certify that I unloaded the cooler and answered questions 7-14 (initial) PN1

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) PN1

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) PN1

I certify that I attached a label with the unique LIMS number to each container (initial) PN1

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..#

TestAmerica Nashville

Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TESTAMERICA
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Andrea Schwellen
Phone: (425) 289-7362

Lab POC: Wagner, Heather
E-Mail: heather.wagner@testamerica.com

Carrier Tracking No(s):

Page: Page 1 of 1
Job #: 22561

Company: Stontec Consulting Corp.

Due Date Requested:

Analysis Requested

Address: 11130 NE 33rd Place Suite 200
City: Bellevue
State, Zip: WA, 98004-1465
Phone: (425) 298-1000 (tel)
Email: paul.fairbairn@stontec.com
Project Name: Z-Eleven #22561
Site: 22561-UST Pull/Replacement

TAI Requested (days):

Standard

Loc: 490
114673

PO #: Purchase Order Requested
WO #:
Project #: 185750386
SSOW #:

Sample Identification

Base - 1 - 17

Sample Date: 10/19/16

Sample Time: 1320

Sample Type: G

Matrix: S

Field Filtered Sample (Yes or No)

NWTFH-Gx

BTEX, MTBE, EDB, EDC (8260C)

NWTFH-Dx

Naphthalene, 1-Methyl Naphthalene, 2-Methyl Naphthalene (8270D Sim)

Total Lead (6010C)

Total Number of containers

8

Special Instructions/Note:

Possible Hazard Identification

☐ Non-Hazard ☐ Immovable ☐ In Initial ☐ on 8 ☐ U-bwn ☐ Rel ☐ Logical

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Ship For _____ Months

Deliverable Requested: I, II, III, IV, Other (Specify)

Date:

Time:

Method of Shipment:

Relinquished by: *Andrea Schwellen*

Date/Time: 10/20/16 1400

Company: Stontec

Received by: *[Signature]*

Date/Time: 10/21/16 1313

Company: TASEA

Custody/Seals Intact: ☐ Yes ☐ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 490-114673-1
SDG Number: UST Pull/Replacement

Login Number: 114673

List Number: 1

Creator: Ngo, Phiet

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Stantec Consulting Corporation
Paul Fairbairn
11130 NE 33rd Pl, Suite 200
Bellevue, WA 98004

RE: 7-Eleven 22561
Work Order Number: 1610162

October 18, 2016

Attention Paul Fairbairn:

Fremont Analytical, Inc. received 4 sample(s) on 10/11/2016 for the analyses presented in the following report.

1,2-Dibromoethane (EDB) by EPA Method 8011
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 200.8
Total Metals by EPA Method 6020
Volatile Organic Compounds by EPA Method 8260C

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Mike Ridgeway
Laboratory Director

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Date: 10/18/2016

CLIENT: Stantec Consulting Corporation
Project: 7-Eleven 22561
Work Order: 1610162

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1610162-001	SP-1	10/11/2016 2:00 PM	10/11/2016 3:53 PM
1610162-002	SP-2	10/11/2016 2:05 PM	10/11/2016 3:53 PM
1610162-003	SP-3	10/11/2016 2:05 PM	10/11/2016 3:53 PM
1610162-004	GW-TP-1	10/11/2016 3:00 PM	10/11/2016 3:53 PM

CLIENT: Stantec Consulting Corporation**Project:** 7-Eleven 22561

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1610162

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Collection Date: 10/11/2016 2:00:00 PM

Project: 7-Eleven 22561

Lab ID: 1610162-001

Matrix: Soil

Client Sample ID: SP-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 15112

Analyst: WC

Diesel (Fuel Oil)	ND	21.9		mg/Kg-dry	1	10/12/2016 5:16:00 PM
Heavy Oil	ND	54.9		mg/Kg-dry	1	10/12/2016 5:16:00 PM
Surr: 2-Fluorobiphenyl	108	50-150		%Rec	1	10/12/2016 5:16:00 PM
Surr: o-Terphenyl	104	50-150		%Rec	1	10/12/2016 5:16:00 PM

Gasoline by NWTPH-Gx

Batch ID: 15091

Analyst: EM

Gasoline	ND	2.20		mg/Kg-dry	1	10/12/2016 2:34:02 AM
Surr: 4-Bromofluorobenzene	101	65-135		%Rec	1	10/12/2016 2:34:02 AM
Surr: Toluene-d8	102	65-135		%Rec	1	10/12/2016 2:34:02 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 15091

Analyst: EM

Benzene	ND	0.00881		mg/Kg-dry	1	10/12/2016 2:34:02 AM
Toluene	ND	0.00881		mg/Kg-dry	1	10/12/2016 2:34:02 AM
Ethylbenzene	ND	0.0132		mg/Kg-dry	1	10/12/2016 2:34:02 AM
m,p-Xylene	ND	0.00881		mg/Kg-dry	1	10/12/2016 2:34:02 AM
o-Xylene	ND	0.00881		mg/Kg-dry	1	10/12/2016 2:34:02 AM
Surr: Dibromofluoromethane	92.0	56.5-129		%Rec	1	10/12/2016 2:34:02 AM
Surr: Toluene-d8	102	64.3-131		%Rec	1	10/12/2016 2:34:02 AM
Surr: 1-Bromo-4-fluorobenzene	99.7	63.1-141		%Rec	1	10/12/2016 2:34:02 AM

Mercury by EPA Method 7471

Batch ID: 15120

Analyst: MW

Mercury	ND	0.269		mg/Kg-dry	1	10/13/2016 2:43:15 PM
---------	----	-------	--	-----------	---	-----------------------

Total Metals by EPA Method 6020

Batch ID: 15103

Analyst: TN

Antimony	ND	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Arsenic	2.51	0.0851		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Beryllium	0.214	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Cadmium	ND	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Chromium	28.9	0.0851		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Copper	14.0	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Lead	2.51	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Nickel	36.9	0.0851		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Selenium	1.21	0.426		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Silver	ND	0.0851		mg/Kg-dry	1	10/12/2016 2:55:58 PM
Thallium	ND	0.170		mg/Kg-dry	1	10/12/2016 2:55:58 PM



Analytical Report

Work Order: 1610162
Date Reported: 10/18/2016

Client: Stantec Consulting Corporation
Project: 7-Eleven 22561
Lab ID: 1610162-001
Client Sample ID: SP-1

Collection Date: 10/11/2016 2:00:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Total Metals by EPA Method 6020</u>				Batch ID: 15103		Analyst: TN
Zinc	28.3	0.426		mg/Kg-dry	1	10/12/2016 2:55:58 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R32259		Analyst: BB
Percent Moisture	8.95	0.500		wt%	1	10/12/2016 8:51:39 AM



Analytical Report

Work Order: 1610162

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Collection Date: 10/11/2016 2:05:00 PM

Project: 7-Eleven 22561

Lab ID: 1610162-002

Matrix: Soil

Client Sample ID: SP-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 15112

Analyst: WC

Diesel (Fuel Oil)	ND	21.7		mg/Kg-dry	1	10/12/2016 5:47:00 PM
Heavy Oil	ND	54.1		mg/Kg-dry	1	10/12/2016 5:47:00 PM
Surr: 2-Fluorobiphenyl	107	50-150		%Rec	1	10/12/2016 5:47:00 PM
Surr: o-Terphenyl	104	50-150		%Rec	1	10/12/2016 5:47:00 PM

Gasoline by NWTPH-Gx

Batch ID: 15091

Analyst: EM

Gasoline	ND	2.68		mg/Kg-dry	1	10/12/2016 3:32:15 AM
Surr: 4-Bromofluorobenzene	99.7	65-135		%Rec	1	10/12/2016 3:32:15 AM
Surr: Toluene-d8	103	65-135		%Rec	1	10/12/2016 3:32:15 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 15091

Analyst: EM

Benzene	ND	0.0107		mg/Kg-dry	1	10/12/2016 3:32:15 AM
Toluene	ND	0.0107		mg/Kg-dry	1	10/12/2016 3:32:15 AM
Ethylbenzene	ND	0.0161		mg/Kg-dry	1	10/12/2016 3:32:15 AM
m,p-Xylene	ND	0.0107		mg/Kg-dry	1	10/12/2016 3:32:15 AM
o-Xylene	ND	0.0107		mg/Kg-dry	1	10/12/2016 3:32:15 AM
Surr: Dibromofluoromethane	91.8	56.5-129		%Rec	1	10/12/2016 3:32:15 AM
Surr: Toluene-d8	102	64.3-131		%Rec	1	10/12/2016 3:32:15 AM
Surr: 1-Bromo-4-fluorobenzene	98.6	63.1-141		%Rec	1	10/12/2016 3:32:15 AM

Mercury by EPA Method 7471

Batch ID: 15120

Analyst: MW

Mercury	ND	0.275		mg/Kg-dry	1	10/13/2016 2:49:44 PM
---------	----	-------	--	-----------	---	-----------------------

Total Metals by EPA Method 6020

Batch ID: 15103

Analyst: TN

Antimony	ND	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Arsenic	3.26	0.0853		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Beryllium	0.284	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Cadmium	ND	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Chromium	33.7	0.0853		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Copper	23.1	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Lead	2.42	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Nickel	44.1	0.0853		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Selenium	1.37	0.426		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Silver	ND	0.0853		mg/Kg-dry	1	10/12/2016 3:17:09 PM
Thallium	ND	0.171		mg/Kg-dry	1	10/12/2016 3:17:09 PM



Analytical Report

Work Order: 1610162
Date Reported: 10/18/2016

Client: Stantec Consulting Corporation
Project: 7-Eleven 22561
Lab ID: 1610162-002
Client Sample ID: SP-2

Collection Date: 10/11/2016 2:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Total Metals by EPA Method 6020</u>				Batch ID: 15103		Analyst: TN
Zinc	34.3	0.426		mg/Kg-dry	1	10/12/2016 3:17:09 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R32259		Analyst: BB
Percent Moisture	9.09	0.500		wt%	1	10/12/2016 8:51:39 AM



Analytical Report

Work Order: 1610162
Date Reported: 10/18/2016

Client: Stantec Consulting Corporation
Project: 7-Eleven 22561
Lab ID: 1610162-003
Client Sample ID: SP-3

Collection Date: 10/11/2016 2:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 15112 Analyst: WC

Diesel (Fuel Oil)	ND	18.3		mg/Kg-dry	1	10/12/2016 6:18:00 PM
Heavy Oil	ND	45.8		mg/Kg-dry	1	10/12/2016 6:18:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%Rec	1	10/12/2016 6:18:00 PM
Surr: o-Terphenyl	97.6	50-150		%Rec	1	10/12/2016 6:18:00 PM

Gasoline by NWTPH-Gx

Batch ID: 15091 Analyst: EM

Gasoline	ND	3.57		mg/Kg-dry	1	10/12/2016 4:01:25 AM
Surr: 4-Bromofluorobenzene	101	65-135		%Rec	1	10/12/2016 4:01:25 AM
Surr: Toluene-d8	101	65-135		%Rec	1	10/12/2016 4:01:25 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 15091 Analyst: EM

Benzene	ND	0.0143		mg/Kg-dry	1	10/12/2016 4:01:25 AM
Toluene	ND	0.0143		mg/Kg-dry	1	10/12/2016 4:01:25 AM
Ethylbenzene	ND	0.0214		mg/Kg-dry	1	10/12/2016 4:01:25 AM
m,p-Xylene	ND	0.0143		mg/Kg-dry	1	10/12/2016 4:01:25 AM
o-Xylene	ND	0.0143		mg/Kg-dry	1	10/12/2016 4:01:25 AM
Surr: Dibromofluoromethane	91.7	56.5-129		%Rec	1	10/12/2016 4:01:25 AM
Surr: Toluene-d8	103	64.3-131		%Rec	1	10/12/2016 4:01:25 AM
Surr: 1-Bromo-4-fluorobenzene	100	63.1-141		%Rec	1	10/12/2016 4:01:25 AM

Mercury by EPA Method 7471

Batch ID: 15120 Analyst: MW

Mercury	ND	0.264		mg/Kg-dry	1	10/13/2016 2:51:20 PM
---------	----	-------	--	-----------	---	-----------------------

Total Metals by EPA Method 6020

Batch ID: 15103 Analyst: TN

Antimony	ND	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Arsenic	2.79	0.0870		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Beryllium	0.202	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Cadmium	ND	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Chromium	30.5	0.0870		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Copper	14.7	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Lead	2.19	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Nickel	35.1	0.0870		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Selenium	1.06	0.435		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Silver	ND	0.0870		mg/Kg-dry	1	10/12/2016 3:20:41 PM
Thallium	ND	0.174		mg/Kg-dry	1	10/12/2016 3:20:41 PM



Analytical Report

Work Order: 1610162

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Project: 7-Eleven 22561

Lab ID: 1610162-003

Client Sample ID: SP-3

Collection Date: 10/11/2016 2:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Total Metals by EPA Method 6020</u>				Batch ID: 15103		Analyst: TN
Zinc	50.4	0.435		mg/Kg-dry	1	10/12/2016 3:20:41 PM
<u>Sample Moisture (Percent Moisture)</u>				Batch ID: R32259		Analyst: BB
Percent Moisture	8.78	0.500		wt%	1	10/12/2016 8:51:39 AM



Analytical Report

Work Order: 1610162
Date Reported: 10/18/2016

Client: Stantec Consulting Corporation
Project: 7-Eleven 22561
Lab ID: 1610162-004
Client Sample ID: GW-TP-1

Collection Date: 10/11/2016 3:00:00 PM

Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>1,2-Dibromoethane (EDB) by EPA Method 8011</u>				Batch ID: 15135		Analyst: NG
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	10/14/2016 9:40:00 PM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 15101		Analyst: EM
Gasoline	40,200	5,000	D	µg/L	100	10/12/2016 9:20:58 PM
Surr: Toluene-d8	96.8	65-135		%Rec	1	10/12/2016 8:51:55 AM
Surr: 4-Bromofluorobenzene	105	65-135		%Rec	1	10/12/2016 8:51:55 AM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 15101		Analyst: EM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	10/12/2016 8:51:55 AM
Benzene	308	100	D	µg/L	100	10/12/2016 9:20:58 PM
Toluene	6,190	200	D	µg/L	200	10/13/2016 12:45:03 AM
Ethylbenzene	1,110	100	D	µg/L	100	10/12/2016 9:20:58 PM
m,p-Xylene	5,050	100	D	µg/L	100	10/12/2016 9:20:58 PM
o-Xylene	2,110	100	D	µg/L	100	10/12/2016 9:20:58 PM
Surr: Dibromofluoromethane	93.8	45.4-152		%Rec	1	10/12/2016 8:51:55 AM
Surr: Toluene-d8	107	40.1-139		%Rec	1	10/12/2016 8:51:55 AM
Surr: 1-Bromo-4-fluorobenzene	103	64.2-128		%Rec	1	10/12/2016 8:51:55 AM
<u>Total Metals by EPA Method 200.8</u>				Batch ID: 15102		Analyst: TN
Lead	4.36	1.00		µg/L	1	10/12/2016 1:27:03 PM



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
1,2-Dibromoethane (EDB) by EPA Method 8011

Sample ID	LCS-15135	SampType:	LCS	Units:	µg/L	Prep Date:	10/14/2016	RunNo:	32381			
Client ID:	LCSW	Batch ID:	15135			Analysis Date:	10/14/2016	SeqNo:	612611			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)												

Sample ID	LCSD-15135	SampType:	LCSD	Units: µg/L		Prep Date:	10/14/2016	RunNo:	32381			
Client ID:	LCSW02	Batch ID:	15135			Analysis Date:	10/14/2016	SeqNo:	612612			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)												

Sample ID	MB-15135	SampType:	MBLK	Units:	µg/L	Prep Date:	10/14/2016	RunNo:	32381					
Client ID:	MBLKW	Batch ID:	15135			Analysis Date:	10/14/2016	SeqNo:	612613					
Analyte		Result	ND	RL	0.0100	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)														

Sample ID	1610162-004BDUP	SampType:	DUP	Units:	µg/L	Prep Date:	10/14/2016	RunNo:	32381			
Client ID:	GW-TP-1	Batch ID:	15135			Analysis Date:	10/14/2016	SeqNo:	612605			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)												



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	MB-15112	SampType: MBLK	Units: mg/Kg		Prep Date: 10/12/2016	RunNo: 32283					
Client ID:	MBLKS	Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610503					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)
Heavy Oil
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	LCS-15112	SampType: LCS	Units: mg/Kg		Prep Date: 10/12/2016	RunNo: 32283					
Client ID: LCSS		Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610502					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	1610162-001ADUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32283					
Client ID:	SP-1	Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610554					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)
Heavy Oil
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	1610162-001AMS	SampType: MS	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32283					
Client ID:	SP-1	Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610555					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	1610162-001AMS	SampType: MS	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32283					
Client ID:	SP-1	Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610555					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1610162-001AMSD	SampType: MSD	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32283					
Client ID:	SP-1	Batch ID: 15112			Analysis Date: 10/12/2016	SeqNo: 610556					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	479	21.7	541.6	0	88.4	65	135	484.3	1.12	30
Surr: 2-Fluorobiphenyl	22.3		21.66		103	50	150		0	
Surr: o-Terphenyl	21.5		21.66		99.3	50	150		0	



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID	LCS-15101	SampType:	LCS	Units:	µg/L	Prep Date:	10/11/2016	RunNo:	32266				
Client ID:	LCSW	Batch ID:	15101			Analysis Date:	10/12/2016	SeqNo:	610192				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		506		50.0	500.0	0		101	65	135			
Surr: Toluene-d8		25.6			25.00			102	65	135			
Surr: 4-Bromofluorobenzene		25.6			25.00			102	65	135			

Sample ID	LCSD-15101	SampType:	LCSD	Units:	µg/L	Prep Date:	10/11/2016	RunNo:	32266				
Client ID:	LCSW02	Batch ID:	15101			Analysis Date:	10/12/2016	SeqNo:	610193				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		496		50.0	500.0	0		99.1	65	135	505.5	1.96	20
Surr: Toluene-d8		25.5			25.00			102	65	135		0	
Surr: 4-Bromofluorobenzene		25.4			25.00			102	65	135		0	

Sample ID	MB-15101	SampType:	MBLK	Units: µg/L				Prep Date:	10/11/2016	RunNo:	32266		
Client ID:	MBLKW	Batch ID:	15101					Analysis Date:	10/12/2016	SeqNo:	610194		
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		ND		50.0									
Surr: Toluene-d8		25.6			25.00			102	65	135			
Surr: 4-Bromofluorobenzene		24.6			25.00			98.4	65	135			

Sample ID	1610139-001ADUP	SampType:	DUP	Units: µg/L				Prep Date:	10/11/2016	RunNo:	32266		
Client ID:	BATCH	Batch ID:	15101					Analysis Date:	10/13/2016	SeqNo:	610650		
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		2,450		50.0						2,347	4.12	30	E
Surr: Toluene-d8		25.3			25.00			101	65	135		0	
Surr: 4-Bromofluorobenzene		25.6			25.00			103	65	135		0	



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID	1610131-008BMS	SampType: MS	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32253						
Client ID: BATCH		Batch ID: 15091			Analysis Date: 10/11/2016	SeqNo: 610109						
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	25.5	4.95	24.77	0	103	65	135
Surr: Toluene-d8	1.24		1.239		100	65	135
Surr: 4-Bromofluorobenzene	1.29		1.239		104	65	135

Sample ID	1610131-008BMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	10/11/2016	RunNo:	32253				
Client ID:	BATCH	Batch ID:	15091			Analysis Date:	10/11/2016	SeqNo:	610111				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	23.9	4.95	24.77	0	96.4	65	135	25.48	6.44	30
Surr: Toluene-d8	1.23		1.239		99.5	65	135		0	
Surr: 4-Bromofluorobenzene	1.28		1.239		103	65	135		0	

Sample ID	MB-15091	SampType:	MBLK	Units: mg/Kg		Prep Date:	10/11/2016	RunNo:	32253				
Client ID:	MBLKS	Batch ID:	15091			Analysis Date:	10/11/2016	SeqNo:	610119				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00											
Surr: Toluene-d8	1.27		1.250		102	65	135						
Surr: 4-Bromofluorobenzene	1.25		1.250		100	65	135						

Sample ID	LCS-15091	SampType:	LCS	Units:	mg/Kg	Prep Date:	10/11/2016	RunNo:	32253				
Client ID:	LCSS	Batch ID:	15091			Analysis Date:	10/12/2016	SeqNo:	610118				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	25.5	5.00	25.00	0	102	65	135
Surr: Toluene-d8	1.28		1.250		102	65	135
Surr: 4-Bromofluorobenzene	1.28		1.250		102	65	135



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID	1610131-001BDUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32253					
Client ID: BATCH	Batch ID: 15091			Analysis Date: 10/12/2016		SeqNo: 610110					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		11.6	7.27						12.41	6.39	30	
Surr: Toluene-d8		1.84		1.817		101	65	135		0		
Surr: 4-Bromofluorobenzene		1.87		1.817		103	65	135		0		

Sample ID	1610162-001BDUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32253					
Client ID: SP-1	Batch ID: 15091			Analysis Date: 10/12/2016		SeqNo: 610113					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline		ND	2.20						0		30	
Surr: Toluene-d8		0.563		0.5506		102	65	135		0		
Surr: 4-Bromofluorobenzene		0.557		0.5506		101	65	135		0		



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID	MB-15120	SampType:	MBLK	Units: mg/Kg		Prep Date:	10/13/2016	RunNo:	32297				
Client ID:	MBLKS	Batch ID:	15120			Analysis Date:	10/13/2016	SeqNo:	610922				
Analyte		Result	ND	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury				0.250									

Sample ID	LCS-15120	SampType:	LCS	Units: mg/Kg		Prep Date:	10/13/2016	RunNo:	32297				
Client ID:	LCSS	Batch ID:	15120			Analysis Date:	10/13/2016	SeqNo:	610923				
Analyte		Result	0.539	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury				0.250	0.5000	0	108	80	120				

Sample ID	1610162-001ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	10/13/2016	RunNo:	32297			
Client ID:	SP-1	Batch ID:	15120			Analysis Date:	10/13/2016	SeqNo:	610925			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND	0.259						0			20

Sample ID	1610162-001AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 10/13/2016	RunNo: 32297			
Client ID: SP-1	Batch ID: 15120					Analysis Date: 10/13/2016	SeqNo: 610926				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.599	0.275	0.5491	0.01680	106	70	130				

Sample ID	1610162-001AMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 10/13/2016	RunNo: 32297				
Client ID: SP-1		Batch ID: 15120					Analysis Date: 10/13/2016	SeqNo: 610927				
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.592	0.269	0.5384	0.01680	107	70	130	0.5986	1.07		20



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID	1610162-003ADUP	SampType: DUP	Units: wt%		Prep Date: 10/12/2016	RunNo: 32259					
Client ID: SP-3	Batch ID: R32259				Analysis Date: 10/12/2016	SeqNo: 610064					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	7.44	0.500						8.780	16.5	20	



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID	MB-15102	SampType:	MBLK	Units: µg/L		Prep Date:	10/12/2016	RunNo:	32272			
Client ID:	MBLKW	Batch ID:	15102			Analysis Date:	10/12/2016	SeqNo:	610275			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead			1.00									

Sample ID	LCS-15102	SampType:	LCS	Units: µg/L		Prep Date:	10/12/2016	RunNo:	32272				
Client ID:	LCSW	Batch ID:	15102			Analysis Date:	10/12/2016	SeqNo:	610276				
Analyte		Result	49.6	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				1.00	50.00	0	99.2	85	115				

Sample ID	1610114-001ADUP	SampType:	DUP	Units:	µg/L	Prep Date:	10/12/2016	RunNo:	32272				
Client ID:	BATCH	Batch ID:	15102			Analysis Date:	10/12/2016	SeqNo:	610278				
Analyte		Result	1.45	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead			1.00						1.415		2.10		30

Sample ID	1610114-001AMS	SampType:	MS	Units: µg/L				Prep Date:	10/12/2016	RunNo:	32272		
Client ID:	BATCH	Batch ID:	15102					Analysis Date:	10/12/2016	SeqNo:	610279		
Analyte		Result	232	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				1.00	250.0	1.415	92.2	70	130				

Sample ID	1610114-001AMSD	SampType:	MSD	Units: µg/L				Prep Date:	10/12/2016	RunNo:	32272		
Client ID:	BATCH	Batch ID:	15102					Analysis Date:	10/12/2016	SeqNo:	610280		
Analyte		Result	229	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead				1.00	250.0	1.415	90.9	70	130	231.9	1.46	30	



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID	MB-15103	SampType: MBLK	Units: mg/Kg		Prep Date: 10/12/2016		RunNo: 32279				
Client ID:	MBLKS	Batch ID: 15103			Analysis Date: 10/12/2016		SeqNo: 610376				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.159									
Arsenic	ND	0.0794									
Beryllium	ND	0.159									
Cadmium	ND	0.159									
Chromium	ND	0.0794									
Copper	ND	0.159									
Lead	ND	0.159									
Nickel	ND	0.0794									
Selenium	ND	0.397									
Silver	ND	0.0794									
Thallium	ND	0.159									
Zinc	ND	0.397									

Sample ID	LCS-15103	SampType:	LCS	Units: mg/Kg			Prep Date: 10/12/2016		RunNo: 32279		
Client ID:	LCSS	Batch ID:	15103				Analysis Date: 10/12/2016		SeqNo: 610377		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.08	0.153	1.908	0	109	80	120				
Arsenic	38.8	0.0763	38.17	0	102	80	120				
Beryllium	1.91	0.153	1.908	0	100	80	120				
Cadmium	2.07	0.153	1.908	0	109	80	120				
Chromium	41.0	0.0763	38.17	0	108	80	120				
Copper	40.4	0.153	38.17	0	106	80	120				
Lead	20.5	0.153	19.08	0	107	80	120				
Nickel	39.9	0.0763	38.17	0	105	80	120				
Selenium	3.87	0.382	3.817	0	101	80	120				
Silver	1.95	0.0763	1.908	0	102	80	120				
Thallium	1.02	0.153	0.9542	0	107	80	120				
Zinc	40.1	0.382	38.17	0	105	80	120				



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	1610162-001ADUP	SampType: DUP	Units: mg/Kg-dry			Prep Date: 10/12/2016	RunNo: 32279				
Client ID:	SP-1	Batch ID: 15103	Analysis Date: 10/12/2016			SeqNo: 610379					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.170						0		20	
Arsenic	2.64	0.0851						2.507	5.25	20	
Beryllium	0.204	0.170						0.2141	4.80	20	
Cadmium	ND	0.170						0		20	
Chromium	27.5	0.0851						28.92	5.12	20	
Copper	12.9	0.170						13.96	7.76	20	
Lead	1.68	0.170						2.512	39.8	20	R
Nickel	35.5	0.0851						36.92	3.95	20	
Selenium	1.06	0.426						1.212	12.9	20	
Silver	ND	0.0851						0		20	
Thallium	ND	0.170						0		20	
Zinc	26.0	0.426						28.35	8.81	20	

NOTES:

R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID	1610162-001AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 10/12/2016		RunNo: 32279			
Client ID:	SP-1	Batch ID: 15103				Analysis Date: 10/12/2016		SeqNo: 610381			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.541	0.172	2.145	0.06241	22.3	75	125				S
Arsenic	46.2	0.0858	42.90	2.507	102	75	125				
Beryllium	2.97	0.172	2.145	0.2141	129	75	125				S
Cadmium	2.07	0.172	2.145	0.04849	94.4	75	125				
Chromium	79.6	0.0858	42.90	28.92	118	75	125				
Copper	66.0	0.172	42.90	13.96	121	75	125				
Lead	22.7	0.172	21.45	2.512	94.1	75	125				
Nickel	86.4	0.0858	42.90	36.92	115	75	125				
Selenium	5.18	0.429	4.290	1.212	92.6	75	125				
Silver	1.26	0.0858	2.145	0.02767	57.4	75	125				S
Thallium	1.08	0.172	1.073	0.03938	97.3	75	125				
Zinc	74.5	0.429	42.90	28.35	108	75	125				



Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	1610162-001AMS	SampType: MS	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32279					
Client ID:	SP-1	Batch ID: 15103			Analysis Date: 10/12/2016	SeqNo: 610381					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID	1610162-001AMS	SampType: MSD	Units: mg/Kg-dry	Prep Date: 10/12/2016	RunNo: 32279						
Client ID: SP-1		Batch ID: 15103		Analysis Date: 10/12/2016	SeqNo: 610382						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	0.516	0.173	2.162	0.06241	21.0	75	125	0.5407	4.70	20	S
Arsenic	46.5	0.0865	43.24	2.507	102	75	125	46.17	0.772	20	
Beryllium	2.96	0.173	2.162	0.2141	127	75	125	2.972	0.545	20	S
Cadmium	2.07	0.173	2.162	0.04849	93.7	75	125	2.074	0.0171	20	
Chromium	78.7	0.0865	43.24	28.92	115	75	125	79.58	1.13	20	
Copper	58.4	0.173	43.24	13.96	103	75	125	65.99	12.3	20	
Lead	23.0	0.173	21.62	2.512	94.5	75	125	22.69	1.16	20	
Nickel	83.2	0.0865	43.24	36.92	107	75	125	86.41	3.72	20	
Selenium	5.20	0.432	4.324	1.212	92.3	75	125	5.182	0.405	20	
Silver	1.28	0.0865	2.162	0.02767	58.1	75	125	1.260	1.91	20	S
Thallium	1.10	0.173	1.081	0.03938	98.6	75	125	1.083	1.95	20	
Zinc	70.6	0.432	43.24	28.35	97.8	75	125	74.53	5.38	20	

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID	1610162-001APDS	SampType: PDS	Units: mg/Kg-dry		Prep Date: 10/12/2016	RunNo: 32279					
Client ID:	SP-1	Batch ID: 15103			Analysis Date: 10/12/2016	SeqNo: 610383					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	5.00	0.170	2.50	0.147	97.0	80	120				
Beryllium	6.74	0.170	2.50	0.503	125	80	120				S
Silver	2.84	0.0851	2.50	0.0650	55.6	80	120				S

NOTES:

S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-15101	SampType: LCS	Units: µg/L			Prep Date: 10/11/2016		RunNo: 32267			
Client ID:	LCSW	Batch ID: 15101				Analysis Date: 10/12/2016		SeqNo: 610187			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	18.6	1.00	20.00	0	93.0	68.8	123				
Benzene	20.8	1.00	20.00	0	104	69.3	132				
Toluene	21.6	1.00	20.00	0	108	61.3	145				
Ethylbenzene	20.2	1.00	20.00	0	101	72	130				
m,p-Xylene	40.6	1.00	40.00	0	102	70.3	134				
o-Xylene	20.3	1.00	20.00	0	102	72.1	131				
Surr: Dibromofluoromethane	24.7		25.00		98.9	45.4	152				
Surr: Toluene-d8	25.4		25.00		102	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	25.8		25.00		103	64.2	128				

Sample ID	MB-15101	SampType: MBLK	Units: µg/L			Prep Date:	RunNo: 32267				
Client ID:	MBLKW	Batch ID: 15101	Analysis Date: 10/12/2016			SeqNo: 610188					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Surr: Dibromofluoromethane	23.9		25.00		95.4	45.4	152				
Surr: Toluene-d8	25.0		25.00		99.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		96.9	64.2	128				

Sample ID	1610139-001ADUP	SampType: DUP	Units: µg/L	Prep Date: 10/11/2016	RunNo: 32267							
Client ID:	BATCH	Batch ID: 15101		Analysis Date: 10/13/2016	SeqNo: 610640							
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)		ND	1.00						0		30	
Benzene		359	1.00						358.9	0.0206	30	E



Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID 1610139-001ADUP		SampType: DUP		Units: µg/L		Prep Date: 10/11/2016		RunNo: 32267			
Client ID: BATCH		Batch ID: 15101				Analysis Date: 10/13/2016		SeqNo: 610640			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	6.50	1.00						6.456	0.662	30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	138	1.00						139.1	0.993	30	E
o-Xylene	73.0	1.00						72.53	0.621	30	E
Surr: Dibromofluoromethane	24.4		25.00		97.8	45.4	152		0		
Surr: Toluene-d8	25.0		25.00		100	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	25.1		25.00		100	64.2	128		0		

Sample ID 1610162-004BMS		SampType: MS		Units: µg/L		Prep Date: 10/11/2016		RunNo: 32267			
Client ID: GW-TP-1		Batch ID: 15101				Analysis Date: 10/13/2016		SeqNo: 610645			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	20.4	1.00	20.00	0	102	63.4	137				
Benzene	317	1.00	20.00	304.1	66.8	65.4	138				E
Toluene	1,760	1.00	20.00	1,765	-17.8	64	139				SE
Ethylbenzene	509	1.00	20.00	496.7	61.8	64.5	136				SE
m,p-Xylene	1,960	1.00	40.00	1,900	154	63.3	135				SE
o-Xylene	1,290	1.00	20.00	1,254	162	65.4	134				SE
Surr: Dibromofluoromethane	23.9		25.00		95.6	45.4	152				
Surr: Toluene-d8	26.3		25.00		105	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	26.5		25.00		106	64.2	128				

NOTES:

S - Outlying spike recovery(ies) observed. The method is in control as indicated by the LCS.

Sample ID	1610162-004BMSD	SampType: MSD	Units: µg/L			Prep Date: 10/11/2016	RunNo: 32267				
Client ID:	GW-TP-1	Batch ID: 15101	Analysis Date: 10/13/2016			SeqNo: 610646					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	19.6	1.00	20.00	0	98.2	63.4	137	20.35	3.59	30	
Benzene	309	1.00	20.00	304.1	26.6	65.4	138	317.5	2.56	30	SE
Toluene	1,520	1.00	20.00	1,765	-1,220	64	139	1,761	14.6	30	SE



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1610162-004BMSD	SampType: MSD	Units: µg/L				Prep Date: 10/11/2016	RunNo: 32267			
Client ID: GW-TP-1	Batch ID: 15101		Analysis Date: 10/13/2016				SeqNo: 610646				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	420	1.00	20.00	496.7	-385	64.5	136	509.0	19.2	30	SE
m,p-Xylene	1,600	1.00	40.00	1,900	-753	63.3	135	1,962	20.4	30	SE
o-Xylene	1,050	1.00	20.00	1,254	-999	65.4	134	1,287	19.8	30	SE
Surr: Dibromofluoromethane	24.0		25.00		96.1	45.4	152		0		
Surr: Toluene-d8	25.8		25.00		103	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	25.9		25.00		104	64.2	128		0		

NOTES:

S - Outlying spike recovery(ies) observed. The method is in control as indicated by the LCS.



Date: 10/18/2016

Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID 1610131-007BMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 10/11/2016		RunNo: 32254			
Client ID: BATCH		Batch ID: 15091		Analysis Date: 10/11/2016		SeqNo: 610099					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.12	0.0206	1.029	0	109	63.5	133				
Toluene	1.16	0.0206	1.029	0.005083	112	63.4	132				
Ethylbenzene	1.07	0.0309	1.029	0	104	54.5	134				
m,p-Xylene	2.15	0.0206	2.058	0	105	53.1	132				
o-Xylene	1.07	0.0206	1.029	0	104	53.3	139				
Surr: Dibromofluoromethane	1.19		1.286		92.7	56.5	129				
Surr: Toluene-d8	1.33		1.286		104	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.36		1.286		106	63.1	141				

Sample ID 1610131-007BMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 10/11/2016		RunNo: 32254			
Client ID: BATCH		Batch ID: 15091				Analysis Date: 10/11/2016		SeqNo: 610100			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.04	0.0206	1.029	0	101	63.5	133	1.117	6.85	30	
Toluene	1.08	0.0206	1.029	0.005083	105	63.4	132	1.158	6.71	30	
Ethylbenzene	1.00	0.0309	1.029	0	97.4	54.5	134	1.074	6.93	30	
m,p-Xylene	2.00	0.0206	2.058	0	97.4	53.1	132	2.152	7.07	30	
o-Xylene	1.01	0.0206	1.029	0	98.2	53.3	139	1.073	6.04	30	
Surr: Dibromofluoromethane	1.22		1.286		94.7	56.5	129		0		
Surr: Toluene-d8	1.33		1.286		104	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	1.37		1.286		107	63.1	141		0		

Sample ID	MB-15091	SampType: MBLK	Units: mg/Kg		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	MBLKS	Batch ID: 15091	Analysis Date: 10/11/2016		SeqNo: 610108						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0200									
Toluene	ND	0.0200									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									

Revision v1



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-15091	SampType: MBLK	Units: mg/Kg		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	MBLKS	Batch ID: 15091	Analysis Date: 10/11/2016		SeqNo: 610108						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	ND	0.0200									
Surr: Dibromofluoromethane	1.19		1.250		94.9	56.5	129				
Surr: Toluene-d8	1.26		1.250		101	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.7	63.1	141				

Sample ID	LCS-15091	SampType: LCS	Units: mg/Kg		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	LCSS	Batch ID: 15091	Analysis Date: 10/12/2016		SeqNo: 610107						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	1.03	0.0200	1.000	0	103	64.3	133				
Toluene	1.06	0.0200	1.000	0	106	67.3	138				
Ethylbenzene	1.00	0.0300	1.000	0	100	74	129				
m,p-Xylene	2.01	0.0200	2.000	0	100	70	124				
o-Xylene	0.994	0.0200	1.000	0	99.4	72.7	124				
Surr: Dibromofluoromethane	1.24		1.250		98.9	56.5	129				
Surr: Toluene-d8	1.28		1.250		102	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.30		1.250		104	63.1	141				

Sample ID	1610131-001BDUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	BATCH	Batch ID: 15091	Analysis Date: 10/12/2016		SeqNo: 610098						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.0291						0		30	
Toluene	ND	0.0291						0		30	
Ethylbenzene	ND	0.0436						0		30	
m,p-Xylene	0.0418	0.0291						0.04606	9.71	30	
o-Xylene	ND	0.0291						0		30	
Surr: Dibromofluoromethane	1.67		1.817		91.7	56.5	129		0		
Surr: Toluene-d8	1.88		1.817		104	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	1.84		1.817		101	63.1	141		0		



Work Order: 1610162

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1610131-001BDUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	BATCH	Batch ID: 15091			Analysis Date: 10/12/2016	SeqNo: 610098					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1610162-001BDUP	SampType: DUP	Units: mg/Kg-dry		Prep Date: 10/11/2016	RunNo: 32254					
Client ID:	SP-1	Batch ID: 15091			Analysis Date: 10/12/2016	SeqNo: 610102					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.00881				0				30	
Toluene	ND	0.00881				0				30	
Ethylbenzene	ND	0.0132				0				30	
m,p-Xylene	ND	0.00881				0				30	
o-Xylene	ND	0.00881				0				30	
Surr: Dibromofluoromethane	0.504		0.5506		91.5	56.5	129		0		
Surr: Toluene-d8	0.558		0.5506		101	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	0.551		0.5506		100	63.1	141		0		

Client Name: **STANTEC**
 Logged by: **Chelsea Ward**

Work Order Number: **1610162**
 Date Received: **10/11/2016 3:53:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >0°C to 10.0°C* Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☒ NA ☐
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date
 By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
 Regarding:
 Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	3.6
Sample	3.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Fremont

ADDITIONAL

Chain of Custody Record and Laboratory Services Agreement

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Date: 10/11/16

Laboratory Project No (Internal): 1610162

Page: 1 of 1

Client: Stantec
Address: 1130 NE 33rd Pl. Ste 200
City, State, Zip: Bellevue, WA
Telephone: 425-869-9448 Fax: _____

Project Name: 7-Eleven 23561
Project No: 185799000 Collected by: Andrea Schweiter
Location: 3280 SW Avalon Way, Seattle, WA
Report To (PM): Paul Fairbairn + Andrea Schweiter
PM Email: paul.fairbairn@stantec.com andrea.schweiter@stantec.com

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DO)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Total Lead	EDC	Total Lead	PID	Comments
1 SP-1	10/11/16	1400	Soil	X	X													26.8 ppm	
2 SP-2		1405		X	X													29.3 ppm	
3 SP-3		1410		X	X													32.6 ppm	
4 GW-TP-1	10/11/16	1500	GW	X	X														
5																			
6																			
7																			
8																			
9																			
10																			

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished Date/Time: 10/11/16 1553 Received Date/Time: 10/11/16 1553

Relinquished Date/Time: _____ Received Date/Time: _____

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

*Please coordinate with the lab in advance



Fremont

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record and Laboratory Services Agreement

Date: 10/11/16

Laboratory Project No (Internal): 16101162

Page: 1 of 1

Client: StanteC
Address: 1130 NE 33rd Pl. Ste 200
City, State, Zip: Bellevue, WA
Telephone: 425-869-9448 Fax:

Project Name: 7-Eleven 23561
Project No: 185799000
Location: 3280 SW Avalon Way, Seattle, WA
Report To (PM): Paul Fairbairn + Andrea Schweiter
PM Email: paul.fairbairn@stantec.com andrea.schweiter@stantec.com

Collected by: Andrea Schweiter

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCS (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)	Total Lead	EDC	Total Lead	PID	Comments
1 SP-1	10/11/16	1400	Soil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	36.8 ppm	
2 SP-2	10/11/16	1405	Soil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	29.3 ppm	
3 SP-3	10/11/16	1410	Soil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32.4 ppm	
4 GW-TP-1	10/11/16	1500	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	X		Add Analysis per client request 10/12/16 and
5																			
6																			
7																			
8																			
9																			
10																			



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Stantec Consulting Corporation
Paul Fairbairn
11130 NE 33rd Pl, Suite 200
Bellevue, WA 98004

RE: 7-Eleven 22561
Work Order Number: 1610271

October 18, 2016

Attention Paul Fairbairn:

Fremont Analytical, Inc. received 3 sample(s) on 10/17/2016 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020
Volatile Organic Compounds by EPA Method 8260C

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Mike Ridgeway
Laboratory Director

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



CLIENT: Stantec Consulting Corporation
Project: 7-Eleven 22561
Work Order: 1610271

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1610271-001	SP-4	10/17/2016 10:30 AM	10/17/2016 12:21 PM
1610271-002	SP-5	10/17/2016 11:10 AM	10/17/2016 12:21 PM
1610271-003	SP-6	10/17/2016 11:15 AM	10/17/2016 12:21 PM

CLIENT: Stantec Consulting Corporation**Project:** 7-Eleven 22561

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1610271

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Collection Date: 10/17/2016 10:30:00 AM

Project: 7-Eleven 22561

Lab ID: 1610271-001

Matrix: Soil

Client Sample ID: SP-4

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>						
				Batch ID: 15145		Analyst: WC
Diesel (Fuel Oil)	278	21.8		mg/Kg-dry	1	10/17/2016 4:03:00 PM
Heavy Oil	ND	54.5		mg/Kg-dry	1	10/17/2016 4:03:00 PM
Surr: 2-Fluorobiphenyl	104	50-150		%Rec	1	10/17/2016 4:03:00 PM
Surr: o-Terphenyl	92.3	50-150		%Rec	1	10/17/2016 4:03:00 PM
<u>Gasoline by NWTPH-Gx</u>						
				Batch ID: 15148		Analyst: NG
Gasoline	ND	2.70		mg/Kg-dry	1	10/17/2016 2:08:50 PM
Surr: 4-Bromofluorobenzene	107	65-135		%Rec	1	10/17/2016 2:08:50 PM
Surr: Toluene-d8	101	65-135		%Rec	1	10/17/2016 2:08:50 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>						
				Batch ID: 15148		Analyst: NG
Benzene	ND	0.0108		mg/Kg-dry	1	10/17/2016 2:08:50 PM
Toluene	ND	0.0108		mg/Kg-dry	1	10/17/2016 2:08:50 PM
Ethylbenzene	ND	0.0162		mg/Kg-dry	1	10/17/2016 2:08:50 PM
m,p-Xylene	0.0317	0.0108		mg/Kg-dry	1	10/17/2016 2:08:50 PM
o-Xylene	ND	0.0108		mg/Kg-dry	1	10/17/2016 2:08:50 PM
Surr: Dibromofluoromethane	93.3	56.5-129		%Rec	1	10/17/2016 2:08:50 PM
Surr: Toluene-d8	103	64.3-131		%Rec	1	10/17/2016 2:08:50 PM
Surr: 1-Bromo-4-fluorobenzene	105	63.1-141		%Rec	1	10/17/2016 2:08:50 PM
<u>Mercury by EPA Method 7471</u>						
				Batch ID: 15151		Analyst: MW
Mercury	ND	0.269		mg/Kg-dry	1	10/18/2016 12:17:34 PM
<u>Total Metals by EPA Method 6020</u>						
				Batch ID: 15147		Analyst: TN
Arsenic	2.30	0.0904		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Barium	40.4	0.452		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Cadmium	ND	0.181		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Chromium	26.2	0.0904		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Lead	2.23	0.181		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Selenium	0.962	0.452		mg/Kg-dry	1	10/18/2016 1:34:53 PM
Silver	ND	0.0904		mg/Kg-dry	1	10/18/2016 1:34:53 PM
<u>Sample Moisture (Percent Moisture)</u>						
				Batch ID: R32351		Analyst: BB
Percent Moisture	15.6			wt%	1	10/17/2016 1:39:07 PM

Original



Analytical Report

Work Order: 1610271

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Collection Date: 10/17/2016 11:10:00 AM

Project: 7-Eleven 22561

Lab ID: 1610271-002

Matrix: Soil

Client Sample ID: SP-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 15145

Analyst: WC

Diesel (Fuel Oil)	1,010	19.4		mg/Kg-dry	1	10/17/2016 5:38:00 PM
Heavy Oil	ND	48.5		mg/Kg-dry	1	10/17/2016 5:38:00 PM
Surr: 2-Fluorobiphenyl	104	50-150		%Rec	1	10/17/2016 5:38:00 PM
Surr: o-Terphenyl	96.0	50-150		%Rec	1	10/17/2016 5:38:00 PM

Gasoline by NWTPH-Gx

Batch ID: 15148

Analyst: NG

Gasoline	ND	2.52		mg/Kg-dry	1	10/17/2016 2:38:17 PM
Surr: 4-Bromofluorobenzene	109	65-135		%Rec	1	10/17/2016 2:38:17 PM
Surr: Toluene-d8	101	65-135		%Rec	1	10/17/2016 2:38:17 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 15148

Analyst: NG

Benzene	ND	0.0101		mg/Kg-dry	1	10/17/2016 2:38:17 PM
Toluene	ND	0.0101		mg/Kg-dry	1	10/17/2016 2:38:17 PM
Ethylbenzene	0.0256	0.0151		mg/Kg-dry	1	10/17/2016 2:38:17 PM
m,p-Xylene	0.0215	0.0101		mg/Kg-dry	1	10/17/2016 2:38:17 PM
o-Xylene	ND	0.0101		mg/Kg-dry	1	10/17/2016 2:38:17 PM
Surr: Dibromofluoromethane	94.9	56.5-129		%Rec	1	10/17/2016 2:38:17 PM
Surr: Toluene-d8	105	64.3-131		%Rec	1	10/17/2016 2:38:17 PM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%Rec	1	10/17/2016 2:38:17 PM

Mercury by EPA Method 7471

Batch ID: 15151

Analyst: MW

Mercury	ND	0.268		mg/Kg-dry	1	10/18/2016 12:19:10 PM
---------	----	-------	--	-----------	---	------------------------

Total Metals by EPA Method 6020

Batch ID: 15147

Analyst: TN

Arsenic	2.67	0.0859		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Barium	46.7	0.429		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Cadmium	ND	0.172		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Chromium	30.8	0.0859		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Lead	1.76	0.172		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Selenium	1.11	0.429		mg/Kg-dry	1	10/18/2016 1:56:08 PM
Silver	ND	0.0859		mg/Kg-dry	1	10/18/2016 1:56:08 PM

Sample Moisture (Percent Moisture)

Batch ID: R32351

Analyst: BB

Percent Moisture	10.4			wt%	1	10/17/2016 1:39:07 PM
------------------	------	--	--	-----	---	-----------------------

Original



Analytical Report

Work Order: 1610271

Date Reported: 10/18/2016

Client: Stantec Consulting Corporation

Collection Date: 10/17/2016 11:15:00 AM

Project: 7-Eleven 22561

Lab ID: 1610271-003

Matrix: Soil

Client Sample ID: SP-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>						
				Batch ID: 15145		Analyst: WC
Diesel (Fuel Oil)	226	19.0		mg/Kg-dry	1	10/17/2016 6:10:00 PM
Heavy Oil	ND	47.5		mg/Kg-dry	1	10/17/2016 6:10:00 PM
Surr: 2-Fluorobiphenyl	117	50-150		%Rec	1	10/17/2016 6:10:00 PM
Surr: o-Terphenyl	97.7	50-150		%Rec	1	10/17/2016 6:10:00 PM
<u>Gasoline by NWTPH-Gx</u>						
				Batch ID: 15148		Analyst: NG
Gasoline	ND	2.29		mg/Kg-dry	1	10/17/2016 3:07:48 PM
Surr: 4-Bromofluorobenzene	108	65-135		%Rec	1	10/17/2016 3:07:48 PM
Surr: Toluene-d8	99.4	65-135		%Rec	1	10/17/2016 3:07:48 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>						
				Batch ID: 15148		Analyst: NG
Benzene	ND	0.00916		mg/Kg-dry	1	10/17/2016 3:07:48 PM
Toluene	ND	0.00916		mg/Kg-dry	1	10/17/2016 3:07:48 PM
Ethylbenzene	ND	0.0137		mg/Kg-dry	1	10/17/2016 3:07:48 PM
m,p-Xylene	0.0243	0.00916		mg/Kg-dry	1	10/17/2016 3:07:48 PM
o-Xylene	ND	0.00916		mg/Kg-dry	1	10/17/2016 3:07:48 PM
Surr: Dibromofluoromethane	93.3	56.5-129		%Rec	1	10/17/2016 3:07:48 PM
Surr: Toluene-d8	105	64.3-131		%Rec	1	10/17/2016 3:07:48 PM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%Rec	1	10/17/2016 3:07:48 PM
<u>Mercury by EPA Method 7471</u>						
				Batch ID: 15151		Analyst: MW
Mercury	ND	0.271		mg/Kg-dry	1	10/18/2016 12:20:46 PM
<u>Total Metals by EPA Method 6020</u>						
				Batch ID: 15147		Analyst: TN
Arsenic	2.04	0.0860		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Barium	56.1	0.430		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Cadmium	ND	0.172		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Chromium	32.4	0.0860		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Lead	2.08	0.172		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Selenium	1.21	0.430		mg/Kg-dry	1	10/18/2016 1:59:40 PM
Silver	ND	0.0860		mg/Kg-dry	1	10/18/2016 1:59:40 PM
<u>Sample Moisture (Percent Moisture)</u>						
				Batch ID: R32351		Analyst: BB
Percent Moisture	11.3			wt%	1	10/17/2016 1:39:07 PM

Original



Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	MB-15145	SampType: MBLK	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	MBLKS	Batch ID: 15145		Analysis Date: 10/17/2016	SeqNo: 612184
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel (Fuel Oil)
Heavy Oil
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	LCS-15145	SampType: LCS	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	LCSS	Batch ID: 15145		Analysis Date: 10/17/2016	SeqNo: 612183
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel (Fuel Oil)
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	1610270-001ADUP	SampType: DUP	Units: mg/Kg-dry	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	BATCH	Batch ID: 15145		Analysis Date: 10/17/2016	SeqNo: 612263
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel (Fuel Oil)
Heavy Oil
Surr: 2-Fluorobiphenyl
Surr: o-Terphenyl

Sample ID	1610259-005ADUP	SampType: DUP	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	BATCH	Batch ID: 15145		Analysis Date: 10/17/2016	SeqNo: 612259
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel (Fuel Oil)
Heavy Oil
Surr: 2-Fluorobiphenyl



Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	1610259-005ADUP	SampType: DUP	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	BATCH	Batch ID: 15145		Analysis Date: 10/17/2016	SeqNo: 612259
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Surr: o-Terphenyl	17.6		17.94		98.3 50 150 0

NOTES:

R - High RPD due to suspected sample inhomogeneity. The method is in control as indicated by the Laboratory Control Sample (LCS).

Sample ID	1610259-005AMS	SampType: MS	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	BATCH	Batch ID: 15145		Analysis Date: 10/18/2016	SeqNo: 612260
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel (Fuel Oil)	442	18.5	462.1	0	95.7 65 135
Surr: 2-Fluorobiphenyl	20.1		18.48		109 50 150
Surr: o-Terphenyl	20.1		18.48		109 50 150

Sample ID	1610259-005AMSD	SampType: MSD	Units: mg/Kg	Prep Date: 10/17/2016	RunNo: 32361
Client ID:	BATCH	Batch ID: 15145		Analysis Date: 10/18/2016	SeqNo: 612261
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel (Fuel Oil)	414	17.0	425.9	0	97.2 65 135 442.1 6.52 30
Surr: 2-Fluorobiphenyl	18.3		17.04		107 50 150 0
Surr: o-Terphenyl	18.2		17.04		107 50 150 0



Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID	LCS-15148	SampType:	LCS	Units: mg/Kg		Prep Date:	10/17/2016	RunNo:	32369				
Client ID:	LCSS	Batch ID:	15148			Analysis Date:	10/17/2016	SeqNo:	612353				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	26.3	5.00			25.00	0	105	65	135				
Surr: Toluene-d8	1.29				1.250		103	65	135				
Surr: 4-Bromofluorobenzene	1.31				1.250		105	65	135				

Sample ID	MB-15148	SampType:	MBLK	Units: mg/Kg		Prep Date:	10/17/2016	RunNo:	32369				
Client ID:	MBLKS	Batch ID:	15148			Analysis Date:	10/17/2016	SeqNo:	612354				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00											
Surr: Toluene-d8	1.27				1.250		102	65	135				
Surr: 4-Bromofluorobenzene	1.28				1.250		103	65	135				

Sample ID	1610198-001BMS	SampType: MS	Units: mg/Kg		Prep Date: 10/18/2016	RunNo: 32369					
Client ID: BATCH	Batch ID: 15148			Analysis Date: 10/18/2016	SeqNo: 612344						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	31.0	5.00			25.00	0	124	65	135				
Surr: Toluene-d8	1.26				1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.30				1.250		104	65	135				

Sample ID	1610198-001BMSD	SampType:	MSD	Units: mg/Kg		Prep Date:	10/18/2016	RunNo:	32369				
Client ID:	BATCH	Batch ID:	15148			Analysis Date:	10/18/2016	SeqNo:	612345				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	28.2	5.00			25.00	0	113	65	135	31.03	9.51	30	
Surr: Toluene-d8	1.28				1.250		102	65	135		0		
Surr: 4-Bromofluorobenzene	1.31				1.250		105	65	135		0		



Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID	MB-15151	SampType:	MBLK	Units: mg/Kg		Prep Date:	10/17/2016	RunNo:	32376				
Client ID:	MBLKS	Batch ID:	15151			Analysis Date:	10/18/2016	SeqNo:	612448				
Analyte		Result	ND	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury				0.240									

Sample ID	LCS-15151	SampType:	LCS	Units: mg/Kg		Prep Date:	10/17/2016	RunNo:	32376				
Client ID:	LCSS	Batch ID:	15151			Analysis Date:	10/18/2016	SeqNo:	612449				
Analyte		Result	0.529	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury				0.245	0.4902	0	108	80	120				

Sample ID	1610194-001ADUP	SampType:	DUP	Units: mg/Kg		Prep Date:	10/17/2016	RunNo:	32376				
Client ID:	BATCH	Batch ID:	15151			Analysis Date:	10/18/2016	SeqNo:	612451				
Analyte		Result	ND	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury				0.250						0			20

Sample ID	1610194-001AMS	SampType: MS	Units: mg/Kg				Prep Date: 10/17/2016	RunNo: 32376				
Client ID: BATCH		Batch ID: 15151					Analysis Date: 10/18/2016	SeqNo: 612452				
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.542	0.240	0.4808	0.03392	106	70	130				

Sample ID	1610194-001AMSD	SampType: MSD	Units: mg/Kg				Prep Date: 10/17/2016	RunNo: 32376				
Client ID: BATCH		Batch ID: 15151					Analysis Date: 10/18/2016	SeqNo: 612453				
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.552	0.250	0.5000	0.03392	104	70	130	0.5423	1.77		20



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Sample Moisture (Percent Moisture)

Sample ID	1610271-003ADUP	SampType: DUP	Units: wt%	Prep Date: 10/17/2016	RunNo: 32351						
Client ID: SP-6	Batch ID: R32351			Analysis Date: 10/17/2016	SeqNo: 611929						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Percent Moisture

10.4

0.500

11.27

8.20

20



Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	MB-15147	SampType: MBLK	Units: mg/Kg			Prep Date: 10/17/2016	RunNo: 32380				
Client ID: MBLKS		Batch ID: 15147				Analysis Date: 10/18/2016	SeqNo: 612568				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.0763									
Barium	ND	0.382									
Cadmium	ND	0.153									
Chromium	ND	0.0763									
Lead	ND	0.153									
Selenium	ND	0.382									
Silver	ND	0.0763									

Sample ID	LCS-15147	SampType:	LCS	Units:	mg/Kg	Prep Date:	10/17/2016	RunNo:	32380		
Client ID:	LCSS	Batch ID:	15147			Analysis Date:	10/18/2016	SeqNo:	612569		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.5	0.0775	38.76	0	102	80	120				
Barium	39.4	0.388	38.76	0	102	80	120				
Cadmium	1.95	0.155	1.938	0	101	80	120				
Chromium	41.8	0.0775	38.76	0	108	80	120				
Lead	19.0	0.155	19.38	0	98.1	80	120				
Selenium	3.42	0.388	3.876	0	88.3	80	120				
Silver	1.77	0.0775	1.938	0	91.3	80	120				

Sample ID	1610271-001ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	10/17/2016	RunNo:	32380		
Client ID:	SP-4	Batch ID:	15147			Analysis Date:	10/18/2016	SeqNo:	612571		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.32	0.0911						2.298	1.00	20	
Barium	46.0	0.455						40.40	12.9	20	
Cadmium	ND	0.182						0		20	
Chromium	27.1	0.0911						26.16	3.46	20	
Lead	2.29	0.182						2.230	2.49	20	
Selenium	1.12	0.455						0.9623	15.1	20	

Original



Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	1610271-001ADUP	SampType:	DUP	Units: mg/Kg-dry		Prep Date:	10/17/2016	RunNo:	32380			
Client ID:	SP-4	Batch ID:	15147			Analysis Date:	10/18/2016	SeqNo:	612571			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver		ND	0.0911						0			20

Sample ID 1610271-001AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 10/17/2016		RunNo: 32380			
Client ID: SP-4		Batch ID: 15147				Analysis Date: 10/18/2016		SeqNo: 612573			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.6	0.0918	45.90	2.298	105	75	125				
Barium	91.2	0.459	45.90	40.40	111	75	125				
Cadmium	2.29	0.184	2.295	0.06925	96.8	75	125				
Chromium	80.8	0.0918	45.90	26.16	119	75	125				
Lead	25.5	0.184	22.95	2.230	101	75	125				
Selenium	5.20	0.459	4.590	0.9623	92.2	75	125				
Silver	1.40	0.0918	2.295	0.03648	59.6	75	125				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID	1610271-001AMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 10/17/2016		RunNo: 32380			
Client ID:	SP-4	Batch ID: 15147				Analysis Date: 10/18/2016		SeqNo: 612574			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.0	0.0911	45.55	2.298	105	75	125	50.63	1.17	20	
Barium	90.9	0.455	45.55	40.40	111	75	125	91.19	0.364	20	
Cadmium	2.26	0.182	2.277	0.06925	96.0	75	125	2.292	1.58	20	
Chromium	82.2	0.0911	45.55	26.16	123	75	125	80.84	1.65	20	
Lead	24.8	0.182	22.77	2.230	99.2	75	125	25.50	2.68	20	
Selenium	5.03	0.455	4.555	0.9623	89.3	75	125	5.195	3.21	20	
Silver	1.49	0.0911	2.277	0.03648	64.0	75	125	1.404	6.15	20	S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Fremont
Analytical

Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	1610271-001APDS	SampType: PDS	Units: mg/Kg-dry		Prep Date: 10/17/2016	RunNo: 32380					
Client ID:	SP-4	Batch ID: 15147			Analysis Date: 10/18/2016	SeqNo: 612575					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Silver

3.22 0.0904 2.50 0.0807 62.7 80 120

S

NOTES:

S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).



Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1610271-001BDUP	SampType: DUP	Units: mg/Kg-dry			Prep Date: 10/17/2016	RunNo: 32368				
Client ID:	SP-4	Batch ID: 15148	Analysis Date: 10/17/2016			SeqNo: 612325					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0108						0		30	
Toluene	ND	0.0108						0		30	
Ethylbenzene	ND	0.0162						0		30	
m,p-Xylene	0.0371	0.0108						0.03174	15.7	30	
o-Xylene	0.0117	0.0108						0.01039	11.9	30	
Surr: Dibromofluoromethane	0.638		0.6753		94.5	56.5	129		0		
Surr: Toluene-d8	0.709		0.6753		105	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	0.706		0.6753		105	63.1	141		0		

Sample ID	LCS-15148	SampType: LCS	Units: mg/Kg			Prep Date: 10/17/2016		RunNo: 32368			
Client ID:	LCSS	Batch ID: 15148				Analysis Date: 10/17/2016		SeqNo: 612331			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.08	0.0200	1.000	0	108	64.3	133				
Toluene	1.14	0.0200	1.000	0	114	67.3	138				
Ethylbenzene	1.06	0.0300	1.000	0	106	74	129				
m,p-Xylene	2.11	0.0200	2.000	0	105	70	124				
o-Xylene	1.05	0.0200	1.000	0	105	72.7	124				
Surr: Dibromofluoromethane	1.23		1.250		98.0	56.5	129				
Surr: Toluene-d8	1.30		1.250		104	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.30		1.250		104	63.1	141				

Sample ID	MB-15148	SampType: MBLK	Units: mg/Kg		Prep Date: 10/17/2016	RunNo: 32368					
Client ID:	MBLKS	Batch ID: 15148	Analysis Date: 10/17/2016		SeqNo: 612332						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0200									
Toluene	ND	0.0200									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									

Original



Date: 10/18/2016

Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-15148	SampType: MBLK	Units: mg/Kg		Prep Date: 10/17/2016	RunNo: 32368					
Client ID:	MBLKS	Batch ID: 15148			Analysis Date: 10/17/2016	SeqNo: 612332					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	ND	0.0200									
Surr: Dibromofluoromethane	1.20		1.250		95.6	56.5	129				
Surr: Toluene-d8	1.27		1.250		101	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		101	63.1	141				

Sample ID	1610179-016BMS	SampType: MS	Units: mg/Kg-dry	Prep Date: 10/17/2016	RunNo: 32368						
Client ID:	BATCH	Batch ID: 15148		Analysis Date: 10/18/2016	SeqNo: 612320						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.905	0.0162	0.8090	0	112	63.5	133				
Toluene	0.936	0.0162	0.8090	0	116	63.4	132				
Ethylbenzene	0.870	0.0243	0.8090	0	108	54.5	134				
m,p-Xylene	1.73	0.0162	1.618	0	107	53.1	132				
o-Xylene	0.870	0.0162	0.8090	0	108	53.3	139				
Surr: Dibromofluoromethane	0.944		1.011		93.3	56.5	129				
Surr: Toluene-d8	1.03		1.011		102	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.06		1.011		105	63.1	141				

Sample ID	1610179-016BMSD	SampType: MSD	Units: mg/Kg-dry		Prep Date: 10/17/2016	RunNo: 32368					
Client ID:	BATCH	Batch ID: 15148			Analysis Date: 10/18/2016	SeqNo: 612321					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.892	0.0162	0.8090	0	110	63.5	133	0.9053	1.44	30	
Toluene	0.883	0.0162	0.8090	0	109	63.4	132	0.9363	5.91	30	
Ethylbenzene	0.856	0.0243	0.8090	0	106	54.5	134	0.8705	1.67	30	
m,p-Xylene	1.70	0.0162	1.618	0	105	53.1	132	1.732	2.01	30	
o-Xylene	0.859	0.0162	0.8090	0	106	53.3	139	0.8702	1.27	30	
Surr: Dibromofluoromethane	0.937		1.011		92.6	56.5	129		0		
Surr: Toluene-d8	1.01		1.011		99.8	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	1.05		1.011		104	63.1	141		0		

Original



Work Order: 1610271

CLIENT: Stantec Consulting Corporation

Project: 7-Eleven 22561

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1610179-016BMSD	SampType: MSD	Units: mg/Kg-dry	Prep Date: 10/17/2016	RunNo: 32368
Client ID:	BATCH	Batch ID: 15148		Analysis Date: 10/18/2016	SeqNo: 612321
Analyte	Result	RL	SPK value	SPK Ref Val	%REC
				LowLimit	HighLimit
				RPD Ref Val	%RPD
					RPDLimit
					Qual

Client Name: **STANTEC**

Work Order Number: **1610271**

Logged by: **Erica Silva**

Date Received: **10/17/2016 12:21:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☒ No ☐
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C * Yes ☒ No ☐ NA ☐
8. Sample(s) in proper container(s)? Yes ☒ No ☐
9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
10. Are samples properly preserved? Yes ☒ No ☐
11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒
13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
14. Does paperwork match bottle labels? Yes ☒ No ☐
15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
16. Is it clear what analyses were requested? Yes ☒ No ☐
17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp $^{\circ}\text{C}$
Cooler	5.6
Sample	9.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Fremont

ANALYTICAL

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record and Laboratory Services Agreement

Date: 10/17/16 Laboratory Project No (Internal): 11610271

Page: 1 of: 1

Client: Stantec
Address: 1130 NE 33rd Pl. Ste 200
City, State, Zip: Belleuve, WA 98004
Telephone: 425-298-1000 Fax: _____

Project Name: 7-Eleven 22561
Project No: 185750386 Collected by: Andrea Schweiter
Location: 3880 SW Avalon Way Seattle, WA
Report To (PM): Paul Fairbairn + Andrea Schweiter
PM Email: Paul.Fairbairn@stantec.com Andrea.Schweiter@stantec.com

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOCS (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	ECRA P Metals	Comments
1 SP-4	10/17/16	1030	S	X												PID = 45.7
2 SP-5		1110	S	X												PID = 54.9
3 SP-6		1115	S	X												PID = 63.7
4																
5																
6																
7																
8																
9																
10																

**Metals Analysis (Circle): MTCA-5 RCA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished Date/Time: 10/17/16 1203 Received Date/Time: 10/17/16 1203

Relinquished Date/Time: 10/17/16 1221 Received Date/Time: 10/17/16 1221

Special Remarks: ASAP TAT

TAT → SameDay* NextDay* 2 Day 3 Day STD

*Please coordinate with the lab in advance



Fremont
Analytical

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Stantec Consulting Corporation
Paul Fairbairn
11130 NE 33rd Pl, Suite 200
Bellevue, WA 98004

RE: 7-11 #22541 Avalon
Work Order Number: 1610296

October 19, 2016

Attention Paul Fairbairn:

Fremont Analytical, Inc. received 5 sample(s) on 10/18/2016 for the analyses presented in the following report.

Hexane Extractable Materials by EPA Method 1664A
pH by SM 4500H+B
Volatile Organic Compounds by EPA Method 8260C

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Mike Ridgeway
Laboratory Director

CC:
Greg McCormick



Date: 10/19/2016

CLIENT: Stantec Consulting Corporation
Project: 7-11 #22541 Avalon
Work Order: 1610296

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1610296-001	Effluent-1	10/18/2016 3:00 PM	10/18/2016 4:10 PM
1610296-002	Effluent (Composite)	10/18/2016 3:00 PM	10/18/2016 4:10 PM
1610296-003	Effluent-1	10/18/2016 3:00 PM	10/18/2016 4:10 PM
1610296-004	Effluent-1	10/18/2016 3:00 PM	10/18/2016 4:10 PM
1610296-005	Effluent-1	10/18/2016 3:00 PM	10/18/2016 4:10 PM

CLIENT: Stantec Consulting Corporation**Project:** 7-11 #22541 Avalon

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Comments for METHOD (PREP-1664), SAMPLE (1610296-002A) required Silica Gel Cleanup Procedure (Using Method No 3630C).

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1610296

Date Reported: 10/19/2016

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

Lab ID: 1610296-001

Collection Date: 10/18/2016 3:00:00 PM

Client Sample ID: Effluent-1

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 15163

Analyst: EM

Benzene	ND	1.00		µg/L	1	10/18/2016 8:24:41 PM
Toluene	ND	1.00		µg/L	1	10/18/2016 8:24:41 PM
Ethylbenzene	ND	1.00		µg/L	1	10/18/2016 8:24:41 PM
m,p-Xylene	ND	1.00		µg/L	1	10/18/2016 8:24:41 PM
o-Xylene	ND	1.00		µg/L	1	10/18/2016 8:24:41 PM
Surr: Dibromofluoromethane	106	45.4-152		%Rec	1	10/18/2016 8:24:41 PM
Surr: Toluene-d8	103	40.1-139		%Rec	1	10/18/2016 8:24:41 PM
Surr: 1-Bromo-4-fluorobenzene	74.7	64.2-128		%Rec	1	10/18/2016 8:24:41 PM

pH by SM 4500H+B

Batch ID: R32394

Analyst: MW

Hydrogen Ion (pH)	9.79		H	pH	1	10/18/2016 5:32:00 PM
-------------------	------	--	---	----	---	-----------------------

Lab ID: 1610296-002

Collection Date: 10/18/2016 3:00:00 PM

Client Sample ID: Effluent (Composite)

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Hexane Extractable Materials by EPA Method 1664A

Batch ID: 15156

Analyst: ME

Hexane Extractable Materials (SGT)	ND	4.00		mg/L	1	10/19/2016 9:37:39 AM
------------------------------------	----	------	--	------	---	-----------------------

NOTES:

Sample is a composite.



Date: 10/19/2016

Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT

Hexane Extractable Materials by EPA Method 1664A

Sample ID	MB-15156	SampType:	MBLK	Units: mg/L		Prep Date:	10/18/2016	RunNo:	32403			
Client ID:	MBLKW	Batch ID:	15156			Analysis Date:	10/19/2016	SeqNo:	613022			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil and Grease)			ND	4.00								

Sample ID	LCS-15156	SampType:	LCS	Units: mg/L		Prep Date:	10/18/2016	RunNo:	32403			
Client ID:	LCSW	Batch ID:	15156			Analysis Date:	10/19/2016	SeqNo:	613023			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil and Grease)		35.2	4.00	40.00	0	88.0	78	114				

Sample ID	LCSD-15156	SampType:	LCSD	Units: mg/L				Prep Date:	10/18/2016	RunNo:	32403	
Client ID:	LCSW02	Batch ID:	15156					Analysis Date:	10/19/2016	SeqNo:	613024	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil and Grease)		34.9	4.00	40.00	0	87.2	78	114	35.20	0.856	27.5	

Sample ID	1610261-001ADUP	SampType:	DUP	Units: mg/L		Prep Date:	10/18/2016	RunNo:	32403				
Client ID:	BATCH	Batch ID:	15156			Analysis Date:	10/19/2016	SeqNo:	613026				
Analyte		Result	ND	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil and Grease)				4.00						0		18	

Sample ID	1610296-002AMS	SampType:	MS	Units: mg/L		Prep Date:	10/18/2016	RunNo:	32403				
Client ID:	Effluent (Composite)	Batch ID:	15156			Analysis Date:	10/19/2016	SeqNo:	613037				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Oil and Grease)		6.38	4.00		43.26	0	14.7	78	114				S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect. Sample is a composite.



Fremont
Analytical

Date: 10/19/2016

Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT
Hexane Extractable Materials by EPA Method 1664A

Sample ID	1610296-002AMSD	SampType: MSD	Units: mg/L		Prep Date: 10/18/2016	RunNo: 32403					
Client ID:	Effluent (Composite)	Batch ID: 15156			Analysis Date: 10/19/2016	SeqNo: 613038					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

HEM (Oil and Grease)

7.50 4.00 40.60 0 18.5 78 114 6.380 16.1 18 S

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
Sample is a composite.



Fremont
Analytical

Date: 10/19/2016

Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT

pH by SM 4500H+B

Sample ID	MB-R32394	SampType:	MBLK	Units: pH		Prep Date:	10/18/2016	RunNo:	32394				
Client ID:	MBLKW	Batch ID:	R32394			Analysis Date:	10/18/2016	SeqNo:	612877				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)		7.51											

Sample ID	LCS-R32394	SampType:	LCS	Units:	pH	Prep Date:	10/18/2016	RunNo:	32394				
Client ID:	LCSW	Batch ID:	R32394			Analysis Date:	10/18/2016	SeqNo:	612878				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)		7.01			7.000	0	100	95	105				

Sample ID	1610296-001BDUP	SampType:	DUP	Units:	pH	Prep Date:	10/18/2016	RunNo:	32394				
Client ID:	Effluent-1	Batch ID:	R32394			Analysis Date:	10/18/2016	SeqNo:	612880				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)		9.78								9.790	0.102	10	H



Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-15163	SampType: LCS	Units: µg/L			Prep Date: 10/18/2016	RunNo: 32397				
Client ID:	LCSW	Batch ID: 15163				Analysis Date: 10/18/2016	SeqNo: 612923				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.3	1.00	20.00	0	86.6	69.3	132				
Toluene	16.6	1.00	20.00	0	83.2	61.3	145				
Ethylbenzene	19.5	1.00	20.00	0	97.3	72	130				
m,p-Xylene	38.7	1.00	40.00	0	96.7	70.3	134				
o-Xylene	18.9	1.00	20.00	0	94.5	72.1	131				
Surr: Dibromofluoromethane	27.0		25.00		108	45.4	152				
Surr: Toluene-d8	23.2		25.00		92.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	26.2		25.00		105	64.2	128				

Sample ID MB-15163		SampType: MBLK		Units: µg/L		Prep Date: 10/18/2016		RunNo: 32397			
Client ID: MBLKW		Batch ID: 15163				Analysis Date: 10/18/2016		SeqNo: 612924			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Surr: Dibromofluoromethane	26.1		25.00		104	45.4	152				
Surr: Toluene-d8	21.8		25.00		87.0	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	24.0		25.00		96.0	64.2	128				

Sample ID	1610296-001ADUP	SampType: DUP	Units: µg/L		Prep Date: 10/18/2016	RunNo: 32397					
Client ID:	Effluent-1	Batch ID: 15163			Analysis Date: 10/18/2016	SeqNo: 612919					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	



Date: 10/19/2016

Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID 1610296-001ADUP		SampType: DUP		Units: µg/L		Prep Date: 10/18/2016		RunNo: 32397			
Client ID: Effluent-1		Batch ID: 15163				Analysis Date: 10/18/2016		SeqNo: 612919			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	ND	1.00						0		30	
Surr: Dibromofluoromethane	25.6		25.00		103	45.4	152		0		
Surr: Toluene-d8	25.8		25.00		103	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	22.4		25.00		89.5	64.2	128		0		

Sample ID 1610277-003DMS		SampType: MS		Units: µg/L		Prep Date: 10/18/2016		RunNo: 32397			
Client ID: BATCH		Batch ID: 15163				Analysis Date: 10/19/2016		SeqNo: 612909			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.7	1.00	20.00	0	114	65.4	138				
Toluene	21.8	1.00	20.00	0	109	64	139				
Ethylbenzene	21.1	1.00	20.00	0	105	64.5	136				
m,p-Xylene	41.2	1.00	40.00	0	103	63.3	135				
o-Xylene	20.4	1.00	20.00	0	102	65.4	134				
Surr: Dibromofluoromethane	26.4		25.00		106	45.4	152				
Surr: Toluene-d8	28.2		25.00		113	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	25.8		25.00		103	64.2	128				

Sample ID 1610277-003DMSD		SampType: MSD		Units: µg/L		Prep Date: 10/18/2016		RunNo: 32397			
Client ID: BATCH		Batch ID: 15163				Analysis Date: 10/19/2016		SeqNo: 612910			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.3	1.00	20.00	0	107	65.4	138	22.71	6.33	30	
Toluene	20.6	1.00	20.00	0	103	64	139	21.85	5.95	30	
Ethylbenzene	20.4	1.00	20.00	0	102	64.5	136	21.09	3.37	30	
m,p-Xylene	39.8	1.00	40.00	0	99.4	63.3	135	41.25	3.63	30	
o-Xylene	19.4	1.00	20.00	0	97.1	65.4	134	20.43	5.11	30	
Surr: Dibromofluoromethane	25.2		25.00		101	45.4	152		0		
Surr: Toluene-d8	28.1		25.00		112	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	26.6		25.00		106	64.2	128		0		

Original



Fremont
Analytical

Date: 10/19/2016

Work Order: 1610296

CLIENT: Stantec Consulting Corporation

Project: 7-11 #22541 Avalon

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1610277-003DMSD	SampType: MSD	Units: µg/L	Prep Date: 10/18/2016	RunNo: 32397						
Client ID: BATCH	Batch ID: 15163			Analysis Date: 10/19/2016	SeqNo: 612910						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Client Name: **STANTEC**
 Logged by: **Clare Griggs**

Work Order Number: **1610296**
 Date Received: **10/18/2016 4:10:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☐ No ☒ NA ☐

Samples received straight from field.

4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☒
 7. Were all items received at a temperature of >0°C to 10.0°C* Yes ☐ No ☐ NA ☒
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is there headspace in the VOA vials? Yes ☐ No ☒ NA ☐
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Chain of Custody Record and Laboratory Services Agreement

11010914

5

aftermath (a state of confusion)

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

[illegible]

Metals Analysis (circle):		Priority Pollutants		TAL		Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sd Se Sr Sn Tl Ti U V Zn				
**Anions (Circle):	Nitrate	Nitrite	Chloride	Sulfate	Bromide	O-Phosphate	Fluoride	Nitrate+Nitrite	Turn-around times for samples	Special Remarks:

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received
<i>[Signature]</i>	5 Jan 19	<i>[Signature]</i>

10/18/16 Green, C. and

Relinquished	Date/Time	Received

Date/Time

TAI → SameDay	NextDay	2 Day	3 Day	STD
---------------	---------	-------	-------	-----

Please coordinate with the lab in advance

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 490-115192-1

Client Project/Site: 7-Eleven # 22561 - Tank Replacement

For:

Stantec Consulting Corp.
11130 NE 33rd Place
Suite 200
Bellevue, Washington 98004-1465

Attn: Paul Fairbairn



Authorized for release by:
11/7/2016 2:53:17 PM

Heather Wagner, Project Manager I
(615)301-5763
heather.wagner@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	7
QC Association	8
Chronicle	9
Method Summary	10
Certification Summary	11
Chain of Custody	12
Receipt Checklists	14

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-115192-1	Effluent-1	Water	10/26/16 13:30	11/01/16 09:25

Case Narrative

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Job ID: 490-115192-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-115192-1

Comments

No additional comments.

Receipt

The samples were received on 11/1/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

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

Organic Prep

Method(s) 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following sample: Effluent-1 (490-115192-1). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

Method(s) 1664B: All Hexane Extractable Material (HEM) sample(s) associated with batch 490-383856 that required Silica Gel Treated - Hexane Extractable Material (SGT-HEM) are below the reporting limit (RL), the result(s) for SGT-HEM was reported as a non-detect. Therefore, no SGT-HEM was performed for the QC (Blank, LCS, LCSD, MS, MSD). All HEM quality control criteria were met.

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

VOA Prep

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

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Client Sample ID: Effluent-1

Date Collected: 10/26/16 13:30

Date Received: 11/01/16 09:25

Lab Sample ID: 490-115192-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			11/05/16 08:15	1
Toluene	ND		1.00		ug/L			11/05/16 08:15	1
Ethylbenzene	ND		1.00		ug/L			11/05/16 08:15	1
Xylenes, Total	ND		3.00		ug/L			11/05/16 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		70 - 130		11/05/16 08:15	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 130		11/05/16 08:15	1
4-Bromofluorobenzene (Surr)	89		70 - 130		11/05/16 08:15	1
Dibromofluoromethane (Surr)	94		70 - 130		11/05/16 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SGT-HEM	ND		3620		ug/L		11/03/16 11:24	11/03/16 11:24	1

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-384307/7

Matrix: Water

Analysis Batch: 384307

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			11/05/16 01:38	1
Toluene	ND		1.00		ug/L			11/05/16 01:38	1
Ethylbenzene	ND		1.00		ug/L			11/05/16 01:38	1
Xylenes, Total	ND		3.00		ug/L			11/05/16 01:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		70 - 130		11/05/16 01:38	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		11/05/16 01:38	1
4-Bromofluorobenzene (Surr)	88		70 - 130		11/05/16 01:38	1
Dibromofluoromethane (Surr)	94		70 - 130		11/05/16 01:38	1

Lab Sample ID: LCS 490-384307/3

Matrix: Water

Analysis Batch: 384307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.03		ug/L		102	80 - 121
Toluene	50.0	53.39		ug/L		107	80 - 126
Ethylbenzene	50.0	55.75		ug/L		112	80 - 130
Xylenes, Total	150	165.2		ug/L		110	80 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	110		70 - 130
4-Bromofluorobenzene (Surr)	87		70 - 130
Dibromofluoromethane (Surr)	88		70 - 130

Lab Sample ID: LCSD 490-384307/4

Matrix: Water

Analysis Batch: 384307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	50.0	51.51		ug/L		103	80 - 121	1	12
Toluene	50.0	53.65		ug/L		107	80 - 126	0	13
Ethylbenzene	50.0	54.93		ug/L		110	80 - 130	1	12
Xylenes, Total	150	161.5		ug/L		108	80 - 132	2	11

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	110		70 - 130
4-Bromofluorobenzene (Surr)	86		70 - 130
Dibromofluoromethane (Surr)	89		70 - 130

TestAmerica Nashville

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

GC/MS VOA

Analysis Batch: 384307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-115192-1	Effluent-1	Total/NA	Water	8260C	
MB 490-384307/7	Method Blank	Total/NA	Water	8260C	
LCS 490-384307/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-384307/4	Lab Control Sample Dup	Total/NA	Water	8260C	

General Chemistry

Prep Batch: 383818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-115192-1	Effluent-1	Total/NA	Water	1664B	

Analysis Batch: 383856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-115192-1	Effluent-1	Total/NA	Water	1664B	383818

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Client Sample ID: Effluent-1

Date Collected: 10/26/16 13:30

Date Received: 11/01/16 09:25

Lab Sample ID: 490-115192-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	10 mL	10 mL	384307	11/05/16 08:15	TSC	TAL NSH
Total/NA	Prep	1664B			1060 mL	960 mL	383818	11/03/16 11:24	BAD	TAL NSH
Total/NA	Analysis	1664B		1			383856	11/03/16 11:24	BAD	TAL NSH

Laboratory References:

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

Method Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
1664B	HEM and SGT-HEM	1664B	TAL NSH

Protocol References:

1664B = 1664B

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: 7-Eleven # 22561 - Tank Replacement

TestAmerica Job ID: 490-115192-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C789	07-19-17

1

2

3

4

5

6

7

8

9

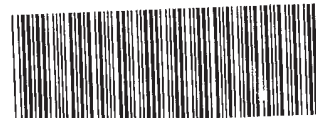
10

11

12

13

COOLER RECEIPT FORM



490-115192 Chain of Custody

Cooler Received/Opened On 11/1/2016 @ 0925

Time Samples Removed From Cooler 13:00 Time Samples Placed In Storage 1415 (2 Hour Window)

1. Tracking # 4225 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 97310166 pH Strip Lot HC58117 Chlorine Strip Lot 06/316W

2. Temperature of rep. sample or temp blank when opened: 1.8 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? 11/1/16 HCG YES...NO...NA

If yes, how many and where: 1 left right

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) HCG

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

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 15

I certify that I unloaded the cooler and answered questions 7-14 (initial) PS

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) HCG

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) HCG

I certify that I attached a label with the unique LIMS number to each container (initial) HCG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..#

Chain of Custody Record

Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Client Information

Client Contact: Greg McCormick
Phone: (206) 604-6177
Company: Stanlec Consulting Corp.

Lab PM: Wagner, Heather
E-Mail: heather.wagner@testamericainc.com

Carrier Tracking No(s):

Page: 1 of 1
Job #: 115192

COC No: THE LEADER IN ENVIRONMENTAL TESTING

Address: 11130 NE 33rd Place Suite 200
City: Bellevue
State, Zip: WA, 98004-1465

Analysis Requested

Loc: 490
115192

Phone: 425-298-1000 (tel)
Email: paul.fairbairn@stanlec.com

Due Date Requested:

TAI Requested (days):

Purchase Order Requested

Project Name: 7-Eleven #22561 Tank Replacement

Project #: 185750386

SSOW#:

Site: 22561 Seattle

Sample Identification

Effluent-1

Sample Date: 10/26/16

Sample Time: 1330

Sample Type: G

Matrix: W

Field Filtered Sample (Yes or No)

Nonpolar FOG

BTEX

Total Number of containers:

For Nonpolar FOG, Composite the 3 ambers

Special Instructions/Note:

- 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 - EDTA
 - M - Hexane
 - N - None
 - O - AshtO2
 - P - Na2OAS
 - Q - Na2SO3
 - R - Na2S2O3
 - S - H2SO4
 - T - TSP Dodecylhydrate
 - U - Acetone
 - V - MCAA
 - W - pH 4.5
 - Z - other (specify)

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Irritant ☐ Corrosive ☐ Other (Specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Ship For _____ Months

Empty Kit Relinquished by: *MM*

Date/Time: 10/26/16 1338

Company: STANLEC

Received by: *Heather Wagner*

Date/Time: 10/26/16 1338

Company: THS ELL

Relinquished by: *Ten Bontek*

Date/Time: 10/31/16

Company: THS

Received by: *Heather Wagner*

Date/Time: 10/31/16 0925

Company: THS

Custody Seals Intact: ☒ Yes ☐ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 490-115192-1

Login Number: 115192

List Number: 1

Creator: Gundi, Hozar K

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**APPENDIX G
KING COUNTY DISCHARGE
AUTHORIZATION
AND
CITY OF SEATTLE SIDE SEWER PERMIT**



King County

Wastewater Treatment Division Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513
Seattle, WA 98104-3855

206-477-5300 Fax 206-263-3001,
TTY Relay: 711

May 25, 2016

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Jose Rios
7-Eleven Inc. - Store 22561 UST Replacement Project
P.O. Box 711
Dallas, TX 75221

Issuance of Wastewater Discharge Authorization No. 1024-01 to 7-Eleven Inc. - Store 22561
UST Replacement Project

Dear Mr. Jose Rios:

The King County Industrial Waste Program (KCIW) has reviewed your application to discharge construction dewatering to the sewer system from the 7-Eleven Inc. - Store 22561 UST Replacement Project construction project located at 3280 SW Avalon Way, Seattle, Washington, and has issued the enclosed Minor Discharge Authorization.

This authorization permits you to discharge limited amounts of industrial wastewater into King County's sewer system in accordance with the effluent limitations and other requirements and conditions set forth in the document and the regulations outlined in King County Code 28.84.060 (enclosed). As long as you maintain compliance with regulations and do not change the nature and volume of your discharge, KCIW will not require you to apply for an industrial wastewater discharge permit, a type of approval that would result in additional requirements and increased fees.

If you propose to increase the volume of your discharge or change the type or quantities of substances discharged, you must contact KCIW at least 60 days before making these changes.

King County Code 28.84 authorizes a fee for each Minor Discharge Authorization issued by the King County Department of Natural Resources and Parks. The current fee for issuance of a Minor Discharge Authorization is \$1200. King County will send you an invoice for this amount.

Jose Rios
May 25, 2016
Page 2

If you have any questions about this discharge authorization or your wastewater discharge, please call me at 206-477-5462 or email me at peggy.rice@kingcounty.gov. You may also wish to visit our program's Internet pages at: www.kingcounty.gov/industrialwaste.

Thank you for helping support our mission to protect public health and enhance the environment.

Sincerely,

A handwritten signature in dark ink, appearing to read "Peggy Rice", with a stylized flourish at the end.

Peggy Rice
Compliance Investigator

Enclosures

cc: Jim Mahady, Seattle Public Utilities
Adam Valenti, Stantec Consulting Services



King County

MINOR DISCHARGE AUTHORIZATION

King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855

NUMBER 1024-01

for

7-Eleven Inc. - Store 22561 UST Replacement Project

Site address: 3280 SW Avalon Way
Seattle, WA 98126

Mailing address: P.O. Box 711
Dallas, TX 75221

Phone: 972-828-6592

Emergency (24-hour) phone: 425-786-5616

Industry type: Construction Dewatering/UST Replacement

Discharge to: West Point

*Note: This authorization is valid only for the specific discharges shown below:

Discharge process: Wastewater generated by Construction Dewatering operation

Pretreatment process: Sedimentation tank, 10 micron filter, and GAC

Maximum discharge volume: 25,000 gallons per day

Maximum discharge rate: 50 gallons per minute

Effective date: May 26, 2016

Expiration date: August 26, 2016

Permission is hereby granted to discharge industrial wastewater from the above-identified facility into the King County sewer system in accordance with the effluent limitations and monitoring requirements set forth in this authorization.

If the industrial user wishes to continue to discharge after the expiration date, an application must be filed for re-issuance of this discharge authorization at least 90 days prior to the expiration date. For information concerning this King County Discharge Authorization please call Industrial Waste Compliance Investigator Peggy Rice at 206-477-5462.

24-HOUR EMERGENCY NOTIFICATION

West Point Treatment Plant: 206-263-3801

Washington State Department of Ecology: 425-649-7000

SPECIAL CONDITIONS

- A. For batch sedimentation discharges a minimum 60-minute quiescent settling time must be maintained prior to any discharges. During this settling time, no discharges to or from the sedimentation tank can occur.
- B. Prior to discharging to the sewer from this project, the permittee must submit a list of 7-Eleven Inc. - Store 22561 UST Replacement Project and contractor personnel responsible for dewatering activities, including operation and maintenance of the wastewater treatment system and monitoring of the discharge to the sanitary sewer. The list shall include the site contacts' name, title, company, and phone numbers (office and cell).
- C. Discharge to the sanitary sewer shall not begin until KCIW has conducted a preoperative inspection of the pretreatment facilities and has sent written notification (email is sufficient) to the permittee that discharges may begin.
- D. All persons responsible for monitoring the discharge to the sanitary sewer shall review a copy of this authorization.
- E. A copy of this authorization shall be on site at all times for review and reference.
- F. This authorization grants the discharge of limited amounts of wastewater from the following waste streams:
 - 1. Contaminated groundwater
 - 2. Excavation dewatering
- G. Wastes or contaminants from sources other than permitted herein shall not be discharged to the sanitary sewer without prior approval from KCIW.
- H. The discharge shall not cause hydraulic overloading conditions of the sewerage conveyance system. During periods of peak hydraulic loading KCIW and Seattle Public Utilities representatives reserve the authority to request that discharge to the sewer be stopped.
- I. All wastewater shall be collected and treated in accordance with treatment methods approved by KCIW. Wastewater shall not bypass treatment systems. Modifications to wastewater treatment systems shall not occur without prior approval from KCIW.
- J. Totalizing and non-resettable flow meters must be installed on all permitted discharge pipes to the sewer.
- K. An accessible sampling spigot must be installed on the discharge pipe from the last treatment unit of the wastewater treatment system. The sample site shall be representative of all industrial waste streams discharged to the sewer from this site. Each sample site shall be accessible to KCIW representatives when discharge to the sewer is occurring.
- L. The contractor shall implement erosion control best management practices to minimize the amount of solids discharged to the sanitary sewer system. As a minimum precaution, the wastewater must be pumped to an appropriately sized settling tank(s) prior to entering the sewer system.
- M. The permittee shall properly operate and maintain all wastewater treatment units to ensure compliance with established discharge limits. Solids accumulation in tanks used for solids settling shall not exceed 25 percent of the tank's working hydraulic capacity. Each tank's working hydraulic capacity is based on the water column height as measured from the bottom

of the tank to either the invert elevation of the tank's outlet pipe (gravity discharges) or discharge pump intake (pumped discharges).

- N. Results of all required self-monitoring sampling must be recorded daily. Recorded information for each discharge site must include:

1. Sample date
2. Sample time
3. Sample results
4. Operator name
5. Comments (if applicable)

These records shall be maintained on site and shall be available for review by KCIW personnel during normal business hours.

- O. The permittee must establish a sewer account with Seattle Public Utilities and provide necessary reports to ensure accurate assessment of sewer charges for all construction dewatering discharge sites associated with this project.

SELF-MONITORING REQUIREMENTS

A. The following self-monitoring requirements shall be met for this discharge authorization:

<u>Parameter</u>	<u>Frequency</u>	<u>Sample Type/Method</u>
Discharge volume	Daily	In-line flow meter
Discharge rate	Daily	In-line flow meter
Settleable solids	Daily	Grab by Imhoff cone
pH	Daily	Hand-held meter
Nonpolar FOG	Weekly	3 Grabs
BTEX (benzene, toluene, ethylene, xylene)	Weekly	Grab

1. The settleable solids field test by Imhoff cone must be performed as follows Fill cone to one-liter mark with well-mixed sample
2. Allow 45 minutes to settle
3. Gently stir sides of cone with a rod or by spinning; settle 15 minutes longer
4. Record volume of settleable matter in the cone as ml/L

- B. The three nonpolar fats, oils, and grease (FOG) grab samples shall be of equal volume, collected at least five minutes apart, and analyzed separately. When using U.S. Environmental Protection Agency approved protocols specified in 40 CFR Part 136, the individual grab samples may be composited (at the laboratory) prior to analysis. The result of the composite sample or the average of the concentrations of the three grab samples may be reported as Total FOG unless the value is 100 mg/L or greater, in which case the concentration of nonpolar FOG must be reported.
- C. If a violation of any discharge limits or operating criteria is detected in monitoring, you shall notify KCIW immediately upon receipt of analytical data.
- D. You shall submit an end-of project self-monitoring report (form enclosed) within 15 days from completion of all construction dewatering activities to the sewer or by **September 15, 2016**, whichever comes first. The report must contain results of required self-monitoring and total volume discharged to the sewer.
- E. All self-monitoring data submitted to KCIW, which required a laboratory analysis, must have been performed by a laboratory accredited by the Washington State Department of Ecology for each parameter tested, using procedures approved by 40 CFR 136. This does not apply to field measurements performed by the industrial user such as pH, temperature, flow, atmospheric hydrogen sulfide, total dissolved sulfides, total settleable solids by Imhoff cone, or process control information.
- F. All sampling data collected by the permittee and analyzed using procedures approved by 40 CFR 136, or approved alternatives, shall be submitted to KCIW whether required as part of this authorization or done voluntarily by the permittee.
- G. Self-monitoring reports shall be signed by an authorized representative of the industrial user. The authorized representative of the industrial user is defined as:
1. The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation

2. The manager of one or more manufacturing, production, or operating facilities, but only if the manager:
 - a. Is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations
 - b. Can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements and knowledgeable of King County reporting requirements
 - c. Has been assigned or delegated the authority to sign documents, in accordance with corporate procedures
3. A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively
4. A director or highest official appointed or designated to oversee the operation and performance of the industry if the industrial user is a government agency
5. The individuals described in one through four above may designate an authorized representative if:
 - a. The authorization is submitted to King County in writing
 - b. The authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company or agency

GENERAL DISCHARGE LIMITATIONS

Operating criteria

There shall be no odor of solvent, gasoline, or hydrogen sulfide (rotten egg odor), oil sheen, unusual color, or visible turbidity. The discharge must remain translucent. If any of the discharge limits are exceeded, you must stop discharging and notify KCIW at 206-477-5300.

Corrosive substances

Limits

Maximum:	pH 12.0 (s.u.)
Instantaneous minimum:	pH 5.0 (s.u.)
Daily minimum:	pH 5.5 (s.u.)

The instantaneous minimum pH limit is violated whenever any single grab sample or any instantaneous recording is less than pH 5.0. The daily minimum pH limit is violated whenever any continuous recording of 15 minutes or longer remains below pH 5.5 or when each pH value of four consecutive grab samples collected at 15-minute intervals or longer within a 24-hour period remains below pH 5.5.

Discharges of more than 50 gallons per day of caustic solutions equivalent to more than 5 percent NaOH by weight or greater than pH 12.0 are prohibited unless authorized by KCIW and subject to special conditions to protect worker safety, the collection system, and treatment works.

Fats, oils, and grease

Discharge of FOG shall not result in significant accumulations that either alone or in combination with other wastes are capable of obstructing flow or interfere with the operation or performance of sewer works or treatment facilities.

Dischargers of polar FOG (oil and grease from animal and/or vegetable origin) shall minimize free-floating polar FOG. Dischargers may not add emulsifying agents exclusively for the purpose of emulsifying free-floating FOG.

Nonpolar FOG limit: 100 mg/L

The limit for nonpolar FOG is violated when the arithmetic mean of the concentration of three grab samples, taken no more frequently than at five minute intervals, or when the results of a composite sample exceed the limitation.

Flammable or explosive materials

No person shall discharge any pollutant, as defined in 40 CFR 403.5, that creates a fire or explosion hazard in any sewer or treatment works, including, but not limited to, waste streams with a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using the test methods specified in 40 CFR 261.21.

At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system), be more than 5 percent nor any single reading be more than 10 percent of the lower explosive limit (LEL) of the meter.

Pollutants subject to this prohibition include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides, and any other substances that King County, the fire department, Washington State, or the U.S. Environmental Protection Agency has notified the user are a fire hazard or a hazard to the system.

Petroleum Compounds	Maximum Concentration ppm (mg/L)
Benzene	0.07
Ethylbenzene	1.7
Toluene	1.4
Total xylenes	2.2

Heavy metals/cyanide

The industrial user shall not discharge wastes, which exceed the following limitations:

Heavy Metals & Cyanide	Instantaneous Maximum ppm (mg/L)¹	Daily Average ppm (mg/L)²
Arsenic	4.0	1.0
Cadmium	0.6	0.5
Chromium	5.0	2.75
Copper	8.0	3.0
Lead	4.0	2.0
Mercury	0.2	0.1
Nickel	5.0	2.5
Silver	3.0	1.0
Zinc	10.0	5.0
Cyanide	3.0	2.0

¹The instantaneous maximum is violated whenever the concentration of any sample, including a grab within a series used to calculate daily average concentrations, exceeds the limitation.

²The daily average limit is violated: a) for a continuous flow system when a composite sample consisting of four or more consecutive samples collected during a 24-hour period over intervals of 15 minutes or greater exceeds the limitation, or b) for a batch system when any sample exceeds the limitation. A composite sample is defined as at least four grab samples of equal volume taken throughout the processing day from a well-mixed final effluent chamber, and analyzed as a single sample.

High temperature

The industrial user shall not discharge material with a temperature in excess of 65° C (150° F).

Hydrogen sulfide

Atmospheric hydrogen sulfide: 10.0 ppm
(As measured at a monitoring manhole designated by KCIW)

Soluble sulfide limits may be established on a case-by-case basis depending upon volume of discharge and conditions in the receiving sewer, including oxygen content and existing sulfide concentrations.

Organic compounds

No person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause worker health and safety problems.

Organic pollutants subject to this restriction include, but are not limited to: Any organic pollutants compound listed in 40 CFR Section 433.11 (e) (total toxic organics [TTO] definition), acetone, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), and xylenes.

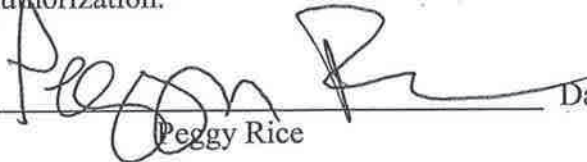
Settleable solids

Settleable solids concentrations: 7.0 ml/L

GENERAL CONDITIONS

- A. All requirements of King County Code pertaining to the discharge of wastes into the municipal sewer system are hereby made a condition of this discharge authorization.
- B. The industrial discharger shall implement measures to prevent accidental spills or discharges of prohibited substances to the municipal sewer system. Such measures include, but are not limited to, secondary containment of chemicals and wastes, elimination of connections to the municipal sewer system, and spill response equipment.
- C. Any facility changes, which will result in a change in the character or volume of the pollutants discharged to the municipal sewer system, must be reported to your KCIW representative. Any changes that will cause the violation of the effluent limitations specified herein will not be allowed.
- D. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:
1. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
 2. Immediately notify KCIW and, if after 5 p.m. weekdays and on weekends, call the emergency King County treatment plant phone number on Page 1 so steps can be taken to prevent damage to the sewer system.
 3. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence.
- E. Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of the discharge authorization or the resulting liability for failure to comply.
- F. The permittee shall, at all reasonable times, allow authorized representatives of KCIW to enter that portion of the premises where an effluent source or disposal system is located or in which any records are required to be kept under the terms and conditions of this authorization.
- G. Nothing in this discharge authorization shall be construed as excusing the permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations including discharge into waters of the state. Any such discharge is subject to regulation and enforcement action by the Washington State Department of Ecology.
- H. This discharge authorization does not authorize discharge after its expiration date. If the permittee wishes to continue to discharge after the expiration date, an application must be filed for reissuance of this discharge authorization at least 90 days prior to the expiration date. If the permittee submits its reapplication in the time specified herein, the permittee shall be deemed to have an effective wastewater discharge authorization until KCIW issues or denies the new wastewater discharge authorization. If the permittee fails to file its reapplication in the time period specified herein, the permittee will be deemed to be discharging without authorization.

Compliance Investigator:


Peggy Rice

Date: May 25, 2016



Industrial Waste Program Self-Monitoring Report

King County

7-Eleven Inc. - Store 22561 UST Replacement Project

Project Location:

3280 SW Avalon Way, Seattle 98126

[illegible]

The authorization holder is responsible for monitoring the discharge in accordance with the monitoring requirements specified in King County Discharge Authorization No. 1024-01. This report form must be completed, signed, and submitted to KCIW by **September 15, 2016**.

Your King County Industrial Waste Program Contact: Peggy Rice 206-477-5462

Schweiter, Andrea

From: Rice, Peggy <Peggy.Rice@kingcounty.gov>
Sent: Friday, June 24, 2016 5:09 PM
To: Valenti, Adam
Subject: Extension for Discharge Authorization 1024-01 (7-Eleven 22561)

Follow Up Flag: Follow up
Flag Status: Completed

Dear Adam-

Since the only change you are requesting to the Minor DA 1024-01 is the expiration date, a revised document with a new expiration date is not needed. With this email, the King County Industrial Waste Program extends the expiration date for Minor DA 1024-01 and authorizes wastewater discharges from the 7-Eleven Store 22561 UST Replacement Project to the sanitary sewer from August 1, 2016 through December 31, 2016. The expiration date of August 26, 2016 is no longer applicable.

Please note that the revised due date for the required end of project self-monitoring report is no longer September 15, 2016, but instead January 15, 2017.

All other terms and conditions of Minor DA 1024-01 apply.

Please keep a copy of this extension approval for your records.

Feel free to contact me if you have any questions regarding this extension.

Peggy Rice
Compliance Investigator
Industrial Waste Program
201 South Jackson Street, Room 513
Seattle, WA 98104-3855
206-477-5462 (office)
206-280-5673 (cell)

From: Valenti, Adam [<mailto:Adam.Valenti@stantec.com>]
Sent: Tuesday, June 14, 2016 10:14 AM
To: Rice, Peggy
Subject: Discharge Authorization 1024-01 (7-Eleven 22561)

Peggy,

The attached discharge authorization (1024-01) expires on 8/26/16. To date there have been no discharges at the Site associated with this authorization. The tank replacement that the discharge was obtained for was delayed, and the project is currently expected to occur sometime between September through December of 2016. Stantec would like to extend this discharge Authorization through December 2016.

Also, should I fill out a blank end-of-project self-monitoring report for September 15, 2016? Or wait until the project begins until submitting the self-monitoring reports?

A final note...If you need to send a revised Letter of Authorization, please only send to Stantec (not to the 7-Eleven Manager Jose Rios). Stantec has signature delegation authority for 7-Eleven projects. Feel free to call or email me with any questions. Thanks for your help

Adam Valenti, PE

Project Engineer

Stantec

11130 NE 33rd Place, Suite 200 Bellevue WA 98004-1465

Phone: 425-289-7350

Cell: 425-786-5616

Adam.Valenti@Stantec.com



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

 Please consider the environment before printing this email.

Seattle Department of
Construction and Inspections
700 Fifth Ave., Suite 2000
P.O. Box 34019
Seattle, WA 98124-4019
(206) 684-8600



CITY OF SEATTLE

Side Sewer Permit

6549985

Permit Number

DISTRICT 8

Site Address: 3280 SW AVALON WAY, SEATTLE, WA

Location:

OWNER'S AGENT

ADAM VALENTI
STANTEC CONSULTING
11130 NE 33RD PL SUITE #200
BELLEVUE, WA 98004
Ph: (425) 786-5616

CONTRACTOR

WILKEY'S CONST. INC OF CA
4557 SKYWAY DR
OLIVEHURST, CA 95961
Ph: (530) 741-2233

Application Date: 08/05/2016

Issue Date: 08/05/2016

Expiration Date: 02/05/2018

Fees Paid: \$225.00

As of Print Date: 08/05/2016

Primary Applicant/Installer

Description of Work: CONSTRUCTION DEWATER ASSOCIATED WITH UNDERGROUND TANK REMOVAL. DISCHARGE TO COMBINED MAIN IN AVALON WAY. ASSOCIATED TO 6483511

Side Sewer

Activity in the Right-of-Way

Curb Crossing and/or Staging: N
Excavation: N
Street Restoration by Registered Contractor: N

Temporary Dewatering for Construction

Type of Work: Field Review

Intake Reviewer COURTENAY, EDE

Drainage Criteria

Flow Control Type:
Treatment Type:
Discharge Point:
Total Development Coverage: Sq. Ft.
New Impervious Surface: Sq. Ft.
New Plus Replace Impervious Surface: Sq. Ft.
Total Area Mitigated by GSI: Sq. Ft.

ATTENTION:

Additional inspection time will be billed at
\$181.00 per hour per SMC 21.16.071

Erosion Control required at ground disturbance.

Permitted work must not be covered until inspected. When ready for inspection, make request with the Seattle Department of Construction and Inspections at (206) 684-8900. Provide site address and permit number.

Permission is hereby given to do the above work at the site address shown, according to the conditions hereon and according to the specification pertaining thereto, subject to compliance with Ordinances of the City of Seattle. Correct information is the responsibility of the applicant. Permits with incorrect information may be subject to additional fees. Permit fee includes one hour of inspection. Inspection time includes office, travel, and inspection time. Call Street Use prior to any work in ROW at (206) 684-5270 or online at SDOTJobStart@seattle.gov

PERMIT PLACARD MUST REMAIN POSTED AT THE WORK SITE

APPENDIX H

DISCHARGE MONITORING REPORT



Send to: King County Industrial Waste Program
201 S. Jackson Street, Suite 513
Seattle, WA 98104-3855
Phone 206-477-5300 / FAX 206-263-3001
Email: info.KCIW@kingcounty.gov

Project Name: 7-Eleven Inc. - Store 22561 UST Replacement Project
Project Location: 3280 SW Avalon Way, Seattle 98126

Authorization No.: 1024-01

[illegible]

The authorization holder is responsible for monitoring the discharge in accordance with the monitoring requirements specified in King County Discharge Authorization No. 1024-01. This report form must be completed, signed, and submitted to KCIW by **September 15, 2016**.

Your King County Industrial Waste Program Contact: Peggy Rice, 206-477-5462