OFF-SITE INVESTIGATION REPORT

Former Plaid Pantries, Inc. Store #324
10645 16th Avenue SW
Seattle, Washington 98146

EES Project E-1133-01
Ecology VCP Project No. NW2585, Site No. 18113426

Prepared For

Plaid Pantries, Inc.
10025 SW Allen Boulevard
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Prepared By

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October 12, 2012

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1 INTRODUCTION

This report documents the results of environmental investigation activities conducted at Plaid Pantries, Inc. (Plaid) former convenience market and retail fueling station #324, located at 10645 16th Avenue SW, Seattle, Washington (Figure 1). Investigation activities included soil sampling in 10 off-site borings located within the 16th Avenue right-of-way adjacent and east of the site. Field sampling activities were conducted August 22-30, 2012.

1.1 PURPOSE

Following the completion of environmental investigation activities at the Plaid site in November 2007 and July 2008 (see summaries provided in Sections 2.2.2 and 2.2.3 below) and in subsequent discussions with Washington Department of Ecology (Ecology), it was determined that site characterization was complete but off-site delineation should be further evaluated in accordance with Ecology's Model Toxics Control Act (MTCA) investigation and cleanup process (Washington Administrative Code [WAC] 173-340). The principal data gap identified was lateral delineation of Plaid's gasoline impacts exceeding MTCA criteria Method-A criteria and extending off-site to the east, beneath the adjoining 16th Avenue roadway.

EES developed a work plan intended to address the above-identified data gap. The work plan, dated August 6, 2012 and approved by Ecology on August 16, 2012, included the following primary work scope elements.

- Preparatory actions including obtaining a Special Use Permit from King County necessary to drill in the 16th Avenue, update of the site-specific health and safety plan for the site, and contacting the Utility Notification Center with a request to identify and field-mark all underground utilities in the immediate site vicinity.
- Field operations for soil boring using air knife and direct-push drilling techniques including up to 12 soil borings advanced and sampled to depths of 20 feet below ground surface at 16th Ave. locations to the east of Plaid's former fueling area. The investigation plan included advancing the borings sequentially such that locations nearest to the former Plaid site were completed and sampled first.
- Use of expedited laboratory analyses to provide rapid evaluation of soil samples, which would allow decisions to be made quickly regarding contingencies to expand the exploration program if needed to include a second and third row of soil borings in the roadway.
- Street restoration activities in accordance with the King County 16th Ave. permit.
- Preparation of a written report documenting the results of the investigation.

2 BACKGROUND

The site is located at the northwest corner of SW 107th Street and 16th Avenue SW in Seattle, Washington (Figure 1). The property is owned by Louise Piacentini and includes a single commercial building occupied by a convenience store and restaurant (Figure 2).

2.1 HISTORICAL RETAIL SERVICE STATION OPERATIONS

Plaid operated the Store #324 retail fueling station at the site between September 1986 and November 30, 1990. Plaid then sub-leased the store building and sold the underground storage tank (UST) system fixtures and equipment to Young Kil Kim and Chae Yop Kim. Fuel storage at the Plaid facility was provided by three gasoline USTs (two 12,000-gallon capacity USTs and one 10,000 gallon capacity UST) which were decommissioned by the sub-tenants in 2006 (Figure 2). Plaid remained the primary lessee of the property until August 31, 2006.

During the operations of Plaid and its sub-tenants, only gasoline is known to have been stored and dispensed at the site. Leaded gasoline may have been dispensed at the site during phase-out of that product in the 1980s. EES understands that neither Plaid nor their sub-tenants stored or dispensed other hydrocarbons such as diesel fuel, bulk motor oil, or bulk solvents at any time during site operations.

Plaid and its sub-tenants operated a leak detection system in accordance with Ecology requirements and no known system leaks were identified or reported to Plaid during the term of Plaid's lease. Tank decommissioning data provided to Plaid in 2007 by the property owner and subsequent investigations by Plaid indicate that gasoline constituents were identified in soil near the former UST system.

2.2 PREVIOUS SITE CHARACTERIZATION ACTIVITIES

2.2.1 UST DECOMMISSIONING ACTIVITIES

Results of the UST decommissioning activities performed by KEE Environmental in 2006 indicated gasoline (310 milligrams per kilogram [mg/kg]), benzene (0.23 mg/kg), and other gasoline constituents were present in excavation sidewall soil sample S-10 at concentrations exceeding MTCA Method-A cleanup criteria.

2.2.2 INITIAL SITE INVESTIGATION – NOVEMBER 2007

An initial site assessment was conducted in November 2007. Four soil borings were sampled to a maximum depth of 29 feet below ground surface. Gasoline, benzene, toluene, ethylbenzene, total xylenes and naphthalene impacts above the MTCA Method A soil cleanup criteria were detected in three of the four borings (B-1 through B-4). Site-specific lead concentrations were found below typical natural background concentrations, which is not indicative of a leaded gasoline release. Groundwater was not encountered in any of the borings.

2.2.3 *Supplemental Site Investigation – July 2008*

Site investigation conducted in July 2008 included advancing and sampling 10 additional soil borings (B-5 through B-14) and conducting a soil vapor extraction test. Gasoline-range organics and related constituents exceeding MTCA Method-A soil cleanup levels were found among shallow soils in an area extending from the northeastern corner of the former UST cavity toward the north and northeast. The greatest relative contaminant concentrations were measured at depths between 4 and 10 feet below ground surface, which was consistent with the 2007 investigation. Deep borings extending to 50 feet below ground surface were advanced at three site locations to provide representative vertical contaminant delineation. Soil impacts were not observed at depths below approximately 14 feet at any site location, and groundwater was not encountered to maximum exploration depths of 50 feet. Based on this site-specific data and regional hydrogeologic information, the water table is not expected within 60 to 100 feet of ground surface in the site vicinity.

2.2.4 *Site Characterization Summary*

Extensive investigation data indicate that the nature and extent of gasoline impacts originating at the site was characterized within the site boundaries. However, the extent of gasoline-impacted soils extending off-site to the east was not fully delineated. Additionally, soil vapor extraction was determined not to be a feasible site remediation technology due to the low-permeability soil conditions observed during pilot testing.

3 OFF-SITE INVESTIGATION ACTIVITIES

On August 22, 2012, soilsampling activities were initiated beginning with a row of six temporary borings in the 16th Avenue roadway, immediately east of the former Plaid site. Traffic control was provided as specified in the work plan and in accordance with the King County 16th Ave. permit. Drilling services (air knife and direct-push) were subcontracted to ESN Northwest, Inc. (ESN) Olympia, Washington.

An air-knife owned and operated by ESN was utilized among shallow soils at each boring location to minimize the risk of encountering unidentified underground features during drilling. As directed, ESN attempted to advance each air-knife boring to a depth of 10 feet below ground surface. Among the 10 borings ultimately drilled during this phase of work (Figure 3), air-knife penetrations extended to depths between 3.5 and 10 feet. To minimize the risk of sample disturbance created by the pressurized air, shallow soil samples were collected manually by hand auger approximately one foot in advance of the air-knife. Direct-push drilling and continuous soil sampling commenced upon completion of the air-knife work.

EES retrieved, examined, and logged soils during drilling. Soil samples were field screened for volatile organic compound vapors using a photoionization detector. Soil samples also were observed for other evidence of gasoline impacts (i.e., discoloration, sheen, and/or odors). Vapor screening results by photoionization detector (in parts per million by volume [ppmV]) and other

observations are summarized in the table below. Boring logs containing additional information regarding the subsurface materials encountered, and observations made, are included in Appendix A.

Boring	Photoionization detector Screening Results	Odor or Sheen?
ROW-1	0.8-132 ppmV	Slight odor
ROW-2	4-52 ppmV	Moderate odor
ROW-3	0-94 ppmV	Moderate odor
ROW-4	3.3-403 ppmV	Moderate odor
ROW-5	1-6 ppmV	No
ROW-6	2-7 ppmV	No
ROW-7	3-6 ppmV	No
ROW-8	3-7 ppmV	No
ROW-9	2-5 ppmV	No
ROW-10	1-6 ppmV	No

3.1 GENERAL FINDINGS

Soil samples were couriered to ESN's laboratory located in Bellevue, Washington for rush analyses. Based upon field observations and as confirmed by analytical data (detailed in Section 4), boring ROW-6 was added to delineate the northern extent of impacts identified at boring ROW-4 (Figure 3). Soil testing results from borings ROW-1 through ROW-4 indicated gasoline impacts were present at these locations adjacent to the former Plaid site, bounded to the south and north by ROW-5 and ROW-6, respectively. A second row comprised of four borings (ROW-7 through ROW-10) was therefore drilled approximately 25 feet further to the east and sampled. Analytical testing results from this second row of borings confirmed no gasoline impacts were detected, and therefore additional soil borings were deemed unnecessary in accordance with the work plan.

3.2 RESTORATION ACTIVITIES

Following the completion of drilling and sampling, each borehole was filled with granular bentonite to within approximately 1 foot of the street surface. The bentonite was hydrated in place as a seal. The upper 1 foot of each boring was then filled with gravel to within a few inches of the street surface, then (as a temporary measure) capped with cold-mix asphalt patch.

On September 30, 2012, final street restoration work was completed by ESN in accordance with the 16th Ave. permit. Traffic control during street restoration work again was provided by K&D

Services, and the restoration work was overseen by EES personnel. ESN removed shallow fill materials previously placed in the borings to the base of the existing street asphalt. Fill material remaining in the boring was re-compacted, and hot-mix asphalt was placed and compacted within each boring to match the top-of-asphalt grade. An asphalt sealant was used to seal the contact between old and new asphalt, and sand laid atop the sealant to allow it to cure while traffic was allowed to resume flow through the work zone.

3.3 INVESTIGATION-DERIVED WASTE

Soil cuttings and wastewater generated during drilling equipment decontamination were placed into 55-gallon capacity steel drums, labeled, and staged on-site. All investigation-derived waste is being profiled for disposal at a permitted facility. Disposal documentation will be provided to Plaid upon receipt.

4 LABORATORY ANALYTICAL RESULTS

A total of 40 soil samples collected during off-site investigation activities were submitted for expedited laboratory analyses. Samples were tested for gasoline by method NWTPH-Gx and related constituents benzene, toluene, ethylbenzene, and xylenes by US Environmental Protection Agency (EPA) Method 8260. All laboratory analyses were performed by ESN in its Bellevue, Washington laboratory. Copies of all ESN laboratory reports are provided in Appendix B.

Benzene, toluene, ethylbenzene, and xylene compounds were not detected among any of the 40 soil samples analyzed (Table 1). Gasoline was detected in six of the soil samples analyzed, at concentrations ranging from 35 to 780 mg/kg. Each of these six detections exceeded the most stringent Ecology MTCA Method-A soil cleanup level for gasoline of 30 mg/kg. Four of the six samples exceeded 100 mg/kg gasoline, which is the MTCA Method-A soil cleanup level applicable for gasoline in the absence of benzene, toluene, ethylbenzene, and xylene compounds.

Borings in which gasoline-range organics were detected included ROW-1 through ROW-4, located in the roadway immediately east of the former Plaid site. Among all four of these borings, identified gasoline impacts were limited to the soil zone between 9 and 12 feet, with the greatest gasoline concentration (780 mg/kg) measured in ROW-1 at 10 feet depth. No gasoline impacts were identified among soils deeper than 12 feet at any off-site location.

5 CONCLUSIONS AND RECOMMENDATIONS

Off-site investigation activities were conducted August 22-30, 2012, and included soil sampling at 10 boring locations. Significant findings of this recent work include the following.

- Gasoline concentrations exceeding Ecology's MTCA Method-A soil cleanup level extend off-site to the east, beneath the 16th Avenue roadway. Among 40 soil samples analyzed, gasoline was detected in six samples at concentrations ranging between 35 and 780 mg/kg and averaging 274 mg/kg.
- Observed gasoline impacts exceeding the most stringent MTCA Method-A soil cleanup criteria extend approximately 20 feet into the roadway area, covering approximately 900 square feet (Figure 4). These contaminated soils were identified at depths between 9 and 12 feet. Field observations and relative volatile headspace measurements using the PID screening instrument at these locations indicated that residual gasoline may extend slightly more broadly within the interval between approximately 8 and 14 feet (Appendix A), but gasoline impacts were not identified or suspected among shallower or deeper soil samples.
- The off-site investigation data confirm that gasoline concentrations decrease both laterally and vertically with distance from the former on-site fueling area.
- The absence of benzene, toluene, ethylbenzene, and xylene constituents at off-site locations indicates that substantial contaminant degradation has occurred, and the magnitude of observed off-site gasoline concentrations (averaging 247 mg/kg) only slightly exceeds the applicable MTCA Method-A soil cleanup standard of 100 mg/kg.
- Groundwater is not expected within 60 to 100 feet of ground surface in the site vicinity.

Observations and analytical results from the roadway area are consistent with previously-characterized on-site gasoline impacts, and we believe provide adequate delineation regarding the extent of related off-site contamination.

6 LIMITATIONS

EES has prepared this report for use by Plaid and its agents. This report may be made available to regulatory agencies at the discretion of Plaid. This report is not intended for use by others and the information contained herein is not applicable to other sites.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices and laws, rules, and regulations at the time that the report was prepared. No other conditions, expressed or implied, should be understood.

In performing environmental site characterization, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. No subsurface exploration can be thorough

enough to exclude the possible presence of hazardous materials or wastes at a given site. The professional opinions in this report are based on the interpretation of data from discrete sampling locations that may not represent conditions at unsampled locations.

EES Environmental Consulting, Inc.

Leonard Farr Jr. LG
Principal Geologist

Paul Ecker, LHG
President

Tables

TABLE 1

Soil Analytical Results - Gasoline and Volatile Organic Compounds (mg/kg)

Plaid Pantry #324

Seattle, Washington

Sample Identification	Sample Depth (feet bgs)	Date Sampled	Gasoline Range Organics (GRO)	Benzene	Toluene	Ethylbenzene	Total Xylenes
ROW-1/3	3	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-1/9	9	08/22/2012	**67**	0.02 U	0.05 U	0.05 U	0.15 U
ROW-1/10	10	08/22/2012	**780**	0.02 U	0.05 U	1.6	3.9
ROW-1/15	15	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-2/3	3	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-2/3 (duplicate)	3	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-2/10	10	08/22/2012	**200**	0.02 U	0.05 U	0.24	0.28
ROW-2/16	16	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-2/18	18	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-3/3	3	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-3/9	9	08/22/2012	**35**	0.02 U	0.05 U	0.05 U	0.15 U
ROW-3/12	12	08/22/2012	**300**	0.02 U	0.05 U	0.05 U	0.15 U
ROW-3/18	18	08/22/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-4/3	3	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-4/10	10	08/23/2012	**260**	0.02 U	0.05 U	0.07	0.15 U
ROW-4/11	11	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-4/15	15	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-5/3	3	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-5/10	10	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-5/15	15	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-5/15 (duplicate)	15	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-6/3	3	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-6/8.5	8.5	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-6/10	10	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-6/16	16	08/23/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-7/3	3	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-7/8	8	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-7/10	10	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-7/14	14	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U

TABLE 1

Soil Analytical Results - Gasoline and Volatile Organic Compounds (mg/kg)

Plaid Pantry #324

Seattle, Washington

Sample Identification	Sample Depth (feet bgs)	Date Sampled	Gasoline Range Organics (GRO)	Benzene	Toluene	Ethylbenzene	Total Xylenes
ROW-8/3	3	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-8/7	7	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-8/10	10	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-8/14	14	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-8/14 (duplicate)	14	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-8/16	16	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-9/3	3	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-9/7	7	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-9/10	10	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-9/15	15	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-10/3	3	08/24/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-10/8	8	08/25/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-10/10	10	08/25/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-10/15	15	08/25/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
ROW-10/15 (duplicate)	15	08/25/2012	10 U	0.02 U	0.05 U	0.05 U	0.15 U
Screening Level Values for Soil							
MTCA Method A Cleanup Level [a]			100,30 [b]	0.03	7	6	9

Notes:

[a] Model Toxics Control Act (MTCA) Cleanup Amendments, Method A Soil Cleanup Levels For Unrestricted Land Use (WDOE, October 12, 2007)

[b] Per MTCA, the cleanup value for gasoline is 30 mg/kg if benzene is detected and/or if the sum of the toluene, ethylbenzene, and xylenes is greater than one percent of the gasoline concentration, and 100 mg/kg for all other gasoline mixtures.

Gasoline and BTEX by NWTPH-Gx/8260

mg/kg = Milligrams per kilogram (parts per million)

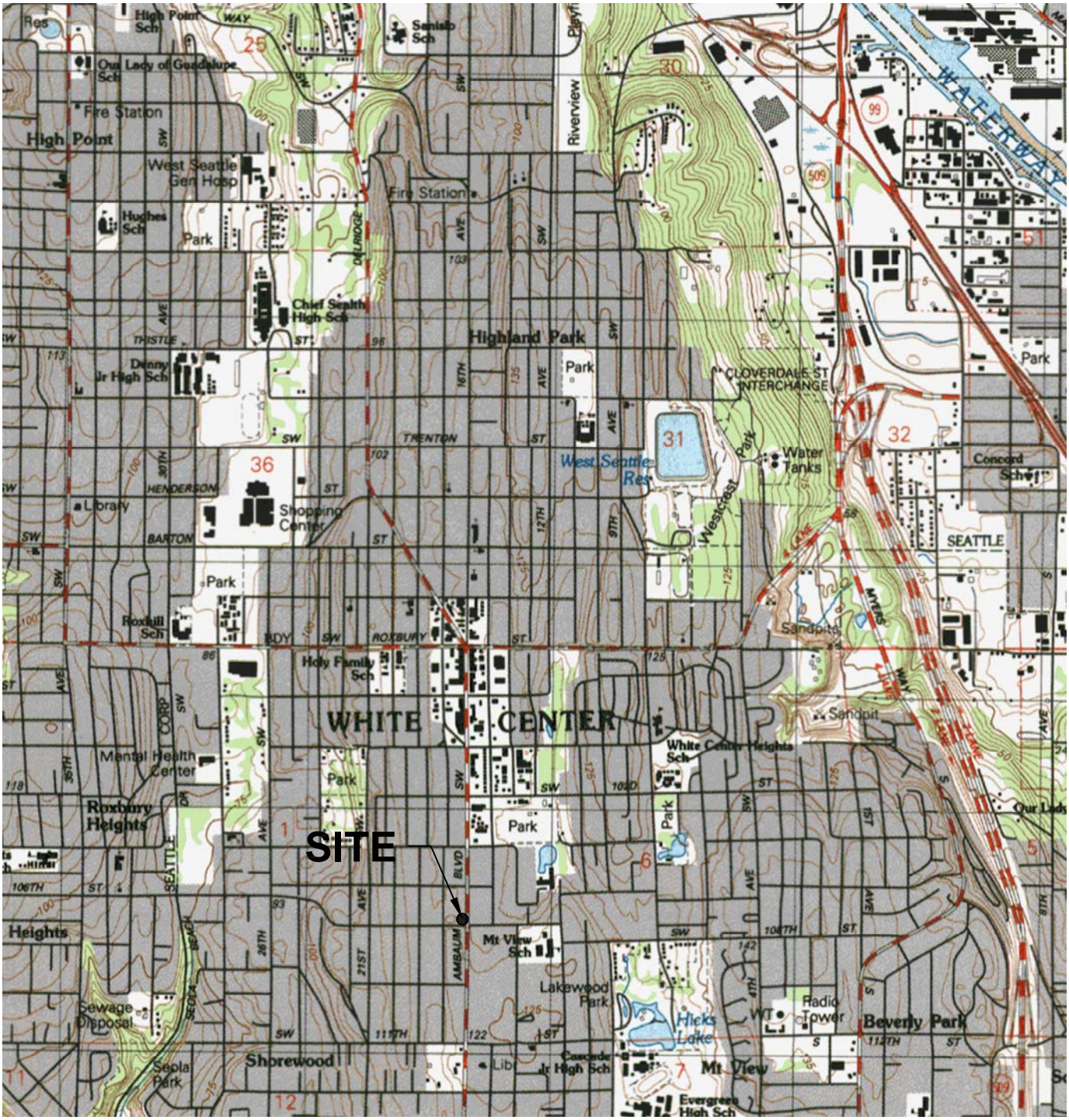
bgs = Below ground surface

U = Not detected at method reporting limit shown

- = Not measured

Values in **bold** indicate the compound concentration exceeds the MTCA Method A Cleanup Level

Figures



NOTE: USGS, Seattle South Quadrangle
Washington - Snohomish Co.
7.5 x 15 Minute Quadrangle,
1983.

APPROXIMATE SCALE IN FEET

0 2000 4000

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PLAID PANTRY #324
10645 16TH AVE. SW
SEATTLE, WA.

SITE LOCATION MAP

DATE:	10-8-12	PROJECT NO. E-1133-01
FILE:	E-1133-01	
DRAWN:	JJT	FIGURE NO. 1
APPROVED:	PE	

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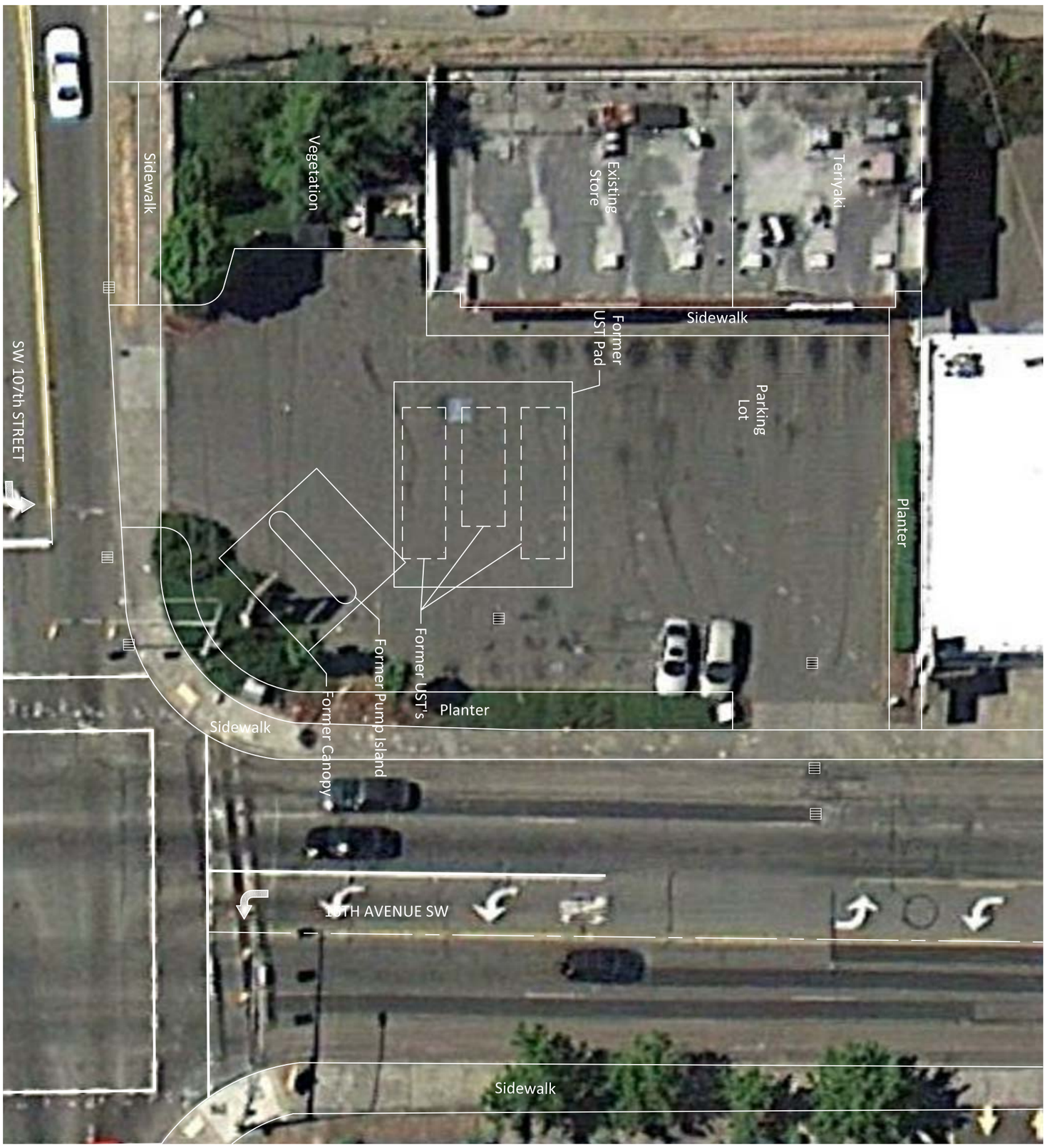

LEGEND

Existing Structures

Former UST's (Removed May 2006)

Catch Basin

0 20 40

APPROXIMATE SCALE IN FEET

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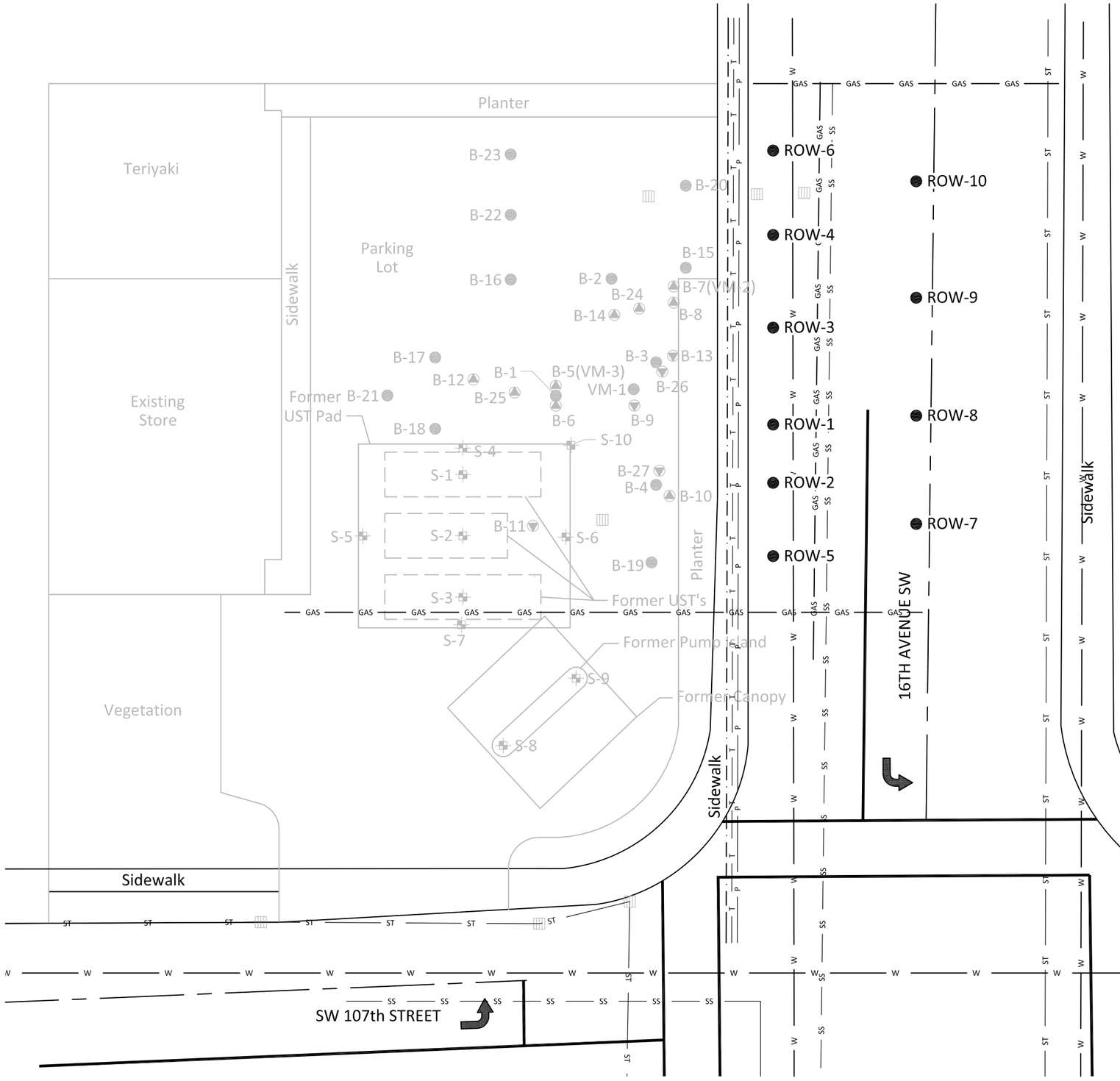
SEATTLE, WA.

SITE FEATURES

DATE:	10-8-12	PROJECT NO.	E-1133-01
FILE:	E-1133-01		
DRAWN:	JJT	FIGURE NO.	2
APPROVED:	PE		



LEGEND

- Existing Structures
- Former UST's (Removed May 2006)
- Catch Basin
- S-6 — Soil Sample Location (KEE, May 2006)
- B-1 — Boring Locations (2007-2009)
- B-5 — SVE Pilot Wells (PNG, July 2008)
- GAS — Gas
- SS — Sewer
- T — Telephone
- W — Water
- SS — San Sewer
- P — Power
- Cable
- Street Center Line
- ROW-1 — Right-of-Way Boring Locations (2012) (Minimum 3' from marked underground utilities)

APPROXIMATE SCALE IN FEET

0 20 40

PROJECT NO.	E-1133-01
FIGURE NO.	3
DATE:	10-8-12
FILE:	E-1133-01
DRAWN:	JJT
APPROVED:	PE

RIGHT OF WAY BORING LOCATIONS

PLAID PANTRY #324
10645 16TH AVE SW.
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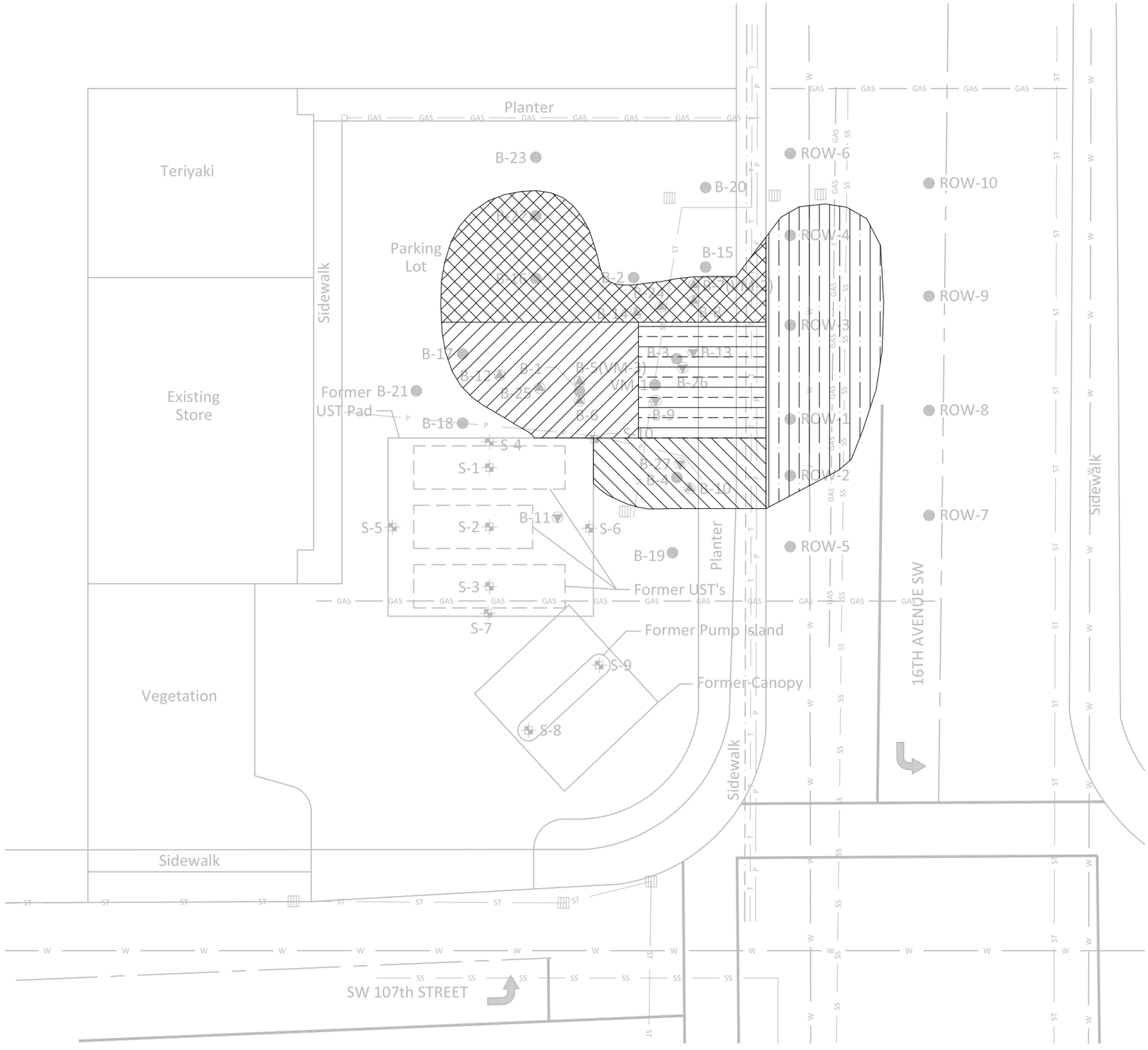
Z:\EES-Autocad\1133-01 Plaid Pantry #324\2012\Oct 2012\1133-01_BM.dwg, Utilities, 10/8/2012 9:06:05 AM



LEGEND

- Existing Structures
- Former UST's (Removed May 2006)
- Catch Basin
- S-6 — Soil Sample Location (KEE, May 2006)
- B-1 — Boring Locations (2007-2009)
- B-5 — SVE Pilot Wells (PNG, July 2008)
- GAS — Gas
- SS — Sewer
- T — Telephone
- W — Water
- ST — San Sewer
- P — Power
- Cable
- Street Center Line
- ROW-1 — Right-of-Way Boring Locations (2012) (Minimum 3' from marked underground utilities)

Gasoline > MTCA Method A Soils Cleanup Level = 30 mg/Kg

- 3 - 6' Zone
- 3 - 10' Zone
- 5 - 10' Zone
- 4 - 12' Zone
- 8 - 14' Zone

APPROXIMATE SCALE IN FEET

0 20 40

PROJECT NO.	E-1133-01
FIGURE NO.	4
DATE:	10-8-12
FILE:	E-1133-01
DRAWN:	JJT
APPROVED:	PE

APPROXIMATE EXTENT OF PETROLEUM IMPACTED SOILS

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Appendix A: Boring Logs

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches).						
			SANDY GRAVEL: dense, brown, sandy GRAVEL with silt. (Fill)						
		ML	SANDY SILT: medium stiff, mottled light brown and reddish brown, fine sandy SILT with disseminated fine gravel.		2.4				ROW-1/3 NWTPH-Gx, BTEX
5		SM	SILTY SAND: dense, brown, silty fine SAND with some fine to coarse rounded gravel.		0.8				ROW-1/6 Hold
					132				ROW-1/9 NWTPH-Gx, BTEX
			Moderate hydrocarbon-like odor.						
10		ML	SILT: hard, brown SILT with trace clay, with scattered gravel, non-plastic. Slight hydrocarbon-like odor.		160				ROW-1/10 NWTPH-Gx, BTEX
			Slight hydrocarbon-like odor.		50				
		GW	GRAVEL: dense, gray GRAVEL with fine to medium sand.		12				ROW-1/15 NWTPH-Gx, BTEX
15			End of boring at 15 feet bgs due to refusal.						
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/22/2012 - 8/22/2012

NOTES:
Air-knifed from 0 to 10 feet bgs. Attempted to hand auger but reached refusal at 10 feet bgs.

Plaid Pantry #324
10645 16th Avenue SW
Seattle, WA 98146

E-1133-01

EES Environmental Consulting, Inc.
240 N Broadway, Suite 115
Portland, Oregon 97227
Tel (503) 847-2740

LOG OF BORING ROW-1

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches).						
			SANDY GRAVEL: dense, brown, sandy GRAVEL with silt. (Fill)						
		ML	SILT: medium stiff, mottled brown and reddish brown, moist SILT with some fine sand.		4.0				ROW-2/3 NWTPH-Gx, BTEX
5		SM	SILTY SAND: medium dense, brown, silty fine SAND with disseminated fine gravel. No odor.		4.7				ROW-2/6 Hold
			Dense gravel layer at 7.5 to 8 feet bgs.						
		ML	SILT: medium stiff to stiff, brown, moist SILT with trace clay, fine sand, disseminated gravel. Gray at 9 to 10 feet bgs.		18				ROW-2/8 Hold
10			Gray at 10 feet bgs. Moderate petroleum hydrocarbon odor.		52				ROW-2/10 NWTPH-Gx, BTEX
		SP	SAND: medium dense, brown, medium SAND. No odor.		8.5				
		ML	SANDY SILT: medium stiff, brown, sandy SILT.						
		GW	GRAVEL: dense, gray, moist, fine to coarse rounded to subrounded GRAVEL with sand.						
15			Silty sand layer at 16 to 17 feet bgs.		11				ROW-2/16 NWTPH-Gx, BTEX
					12				ROW-2/18 NWTPH-Gx, BTEX
			End of boring at 18 feet bgs due to refusal.						
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/22/2012 - 8/22/2012

NOTES:
Air-knifed from 0 to 7.5 feet bgs due to refusal in rock.

Plaid Pantry #324
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LOG OF BORING ROW-2

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches).						
			SANDY GRAVEL: dense, brown, sandy GRAVEL with silt. (Fill)						
		SM	SILTY SAND: medium dense, brown and reddish brown, silty fine to medium SAND with trace coarse to fine rounded gravel.		7.5				ROW-3/3 NWTPH-Gx, BTEX
5		ML	SANDY SILT: medium stiff, brown, moist, sandy SILT, scattered gravel inclusions, non-plastic.		0.0				
			Color changes to gray. Moderate hydrocarbon-like odor.		9.4				ROW-3/9 NWTPH-Gx, BTEX
10			Becomes stiff.		94				ROW-3/12 NWTPH-Gx, BTEX
		GW	GRAVEL: dense, fine to coarse rounded to subrounded GRAVEL with some sand (20-30%). No odor.		6.4				
15			Sand content increases to sandy (40%) at 16 to 17 feet bgs.		9.4				
					6.2				ROW-3/18 NWTPH-Gx, BTEX
			End of boring at 18 feet bgs due to refusal.						
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/22/2012 - 8/22/2012

NOTES:
Air-knifed from 0 to 3.5 feet bgs due to refusal. Hand augered to refusal at 4 feet bgs.

Plaid Pantry #324
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LOG OF BORING ROW-3

DEPTH (ft bgs)	USCS SYMBOL	SOIL DESCRIPTION	VOLATILE READING (ppmV)	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0		Asphalt (8 inches).		
		SANDY GRAVEL: dense, brown, sandy GRAVEL with silt. (Fill)		
	SM	SILTY SAND: medium dense, brown and yellowish brown, moist, silty SAND with some fine to coarse rounded gravel. No odor.	3.3	ROW-4/3 NWTPH-Gx, BTEX
5		Becomes gravelly at 6 feet bgs.		
	GM	SILTY GRAVEL: dense, brown and yellowish brown, moist, silty fine to coarse rounded to subrounded GRAVEL with some fine to medium sand.	3.7	
	ML	SANDY SILT: stiff, brown, moist, sandy SILT with some fine rounded gravel.	13	
10		Color changes to gray. Zone (< 1 foot thick) with moderate petroleum hydrocarbon odor.	403	ROW-4/10 NWTPH-Gx, BTEX
	SM	SILTY SAND: medium dense, light brown, silty SAND with trace fine rounded gravel. No odor.	7.0	ROW-4/11 NWTPH-Gx, BTEX
			4.3	
	GP	SANDY GRAVEL: dense, light brown, moist, sandy fine rounded to subrounded GRAVEL.	4.5	ROW-4/15 NWTPH-Gx, BTEX
15			5.8	
			4.5	ROW-4/18 Hold
		End of boring at 18 feet bgs due to refusal.		
20				
25				
30				

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

ELEVATION REFERENCE: NA

DRILL RIG: AMS 9630

GROUND SURFACE ELEVATION: NA

CONTRACTOR: ESN

START CARD/TAG ID: NA

LOGGED BY/REVIEWED BY: JF/LF

DRILLING DATES: 8/23/2012 - 8/23/2012

NOTES:
Air-knifed from 0 to 7 feet bgs due to refusal. Hand augered to refusal at 7 feet bgs.

Plaid Pantry #324
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LOG OF BORING ROW-4

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches).						
			SANDY GRAVEL: dense, brown, sandy GRAVEL with silt. (Fill)						
		SM	SILTY SAND: medium dense, brown, silty fine to medium SAND with trace coarse to fine rounded gravel.		4.5				ROW-5/3 NWTPH-Gx, BTEX
5			Becomes gravelly; rock in sampler at 6 feet bgs. Very hard hand augering. Poor recovery.		3.6 3.0				
10		ML	SANDY SILT: stiff to very stiff, brown, sandy SILT with scattered fine gravel inclusions.		5.1				ROW-5/10 NWTPH-Gx, BTEX
			Becomes hard.		5.0				
15		GP	SANDY GRAVEL: dense, brown, moist, sandy fine rounded to subrounded GRAVEL. No odor.		1.0 5.8				ROW-5/15 NWTPH-Gx, BTEX
			End of boring at 18 feet bgs due to refusal.		4.0				ROW-5/18 Hold
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/23/2012 - 8/23/2012

NOTES:
Air-knifed from 0 to 5 feet bgs due to refusal. Hand augered to refusal at 6.5 feet bgs.

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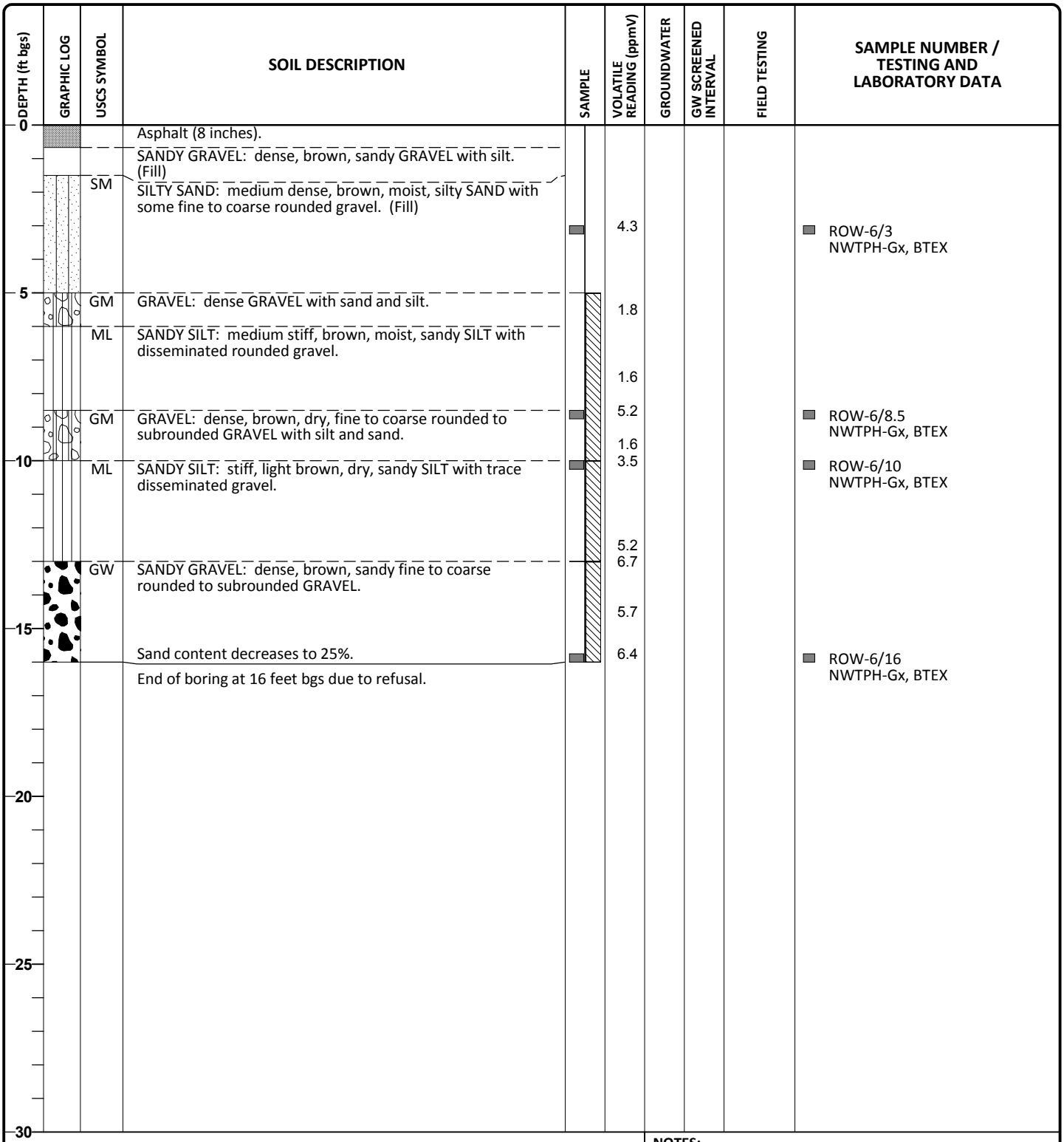
LOG OF BORING
ROW-5



BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

ELEVATION REFERENCE: NA

DRILL RIG: AMS 9630

GROUND SURFACE ELEVATION: NA

CONTRACTOR: ESN

START CARD/TAG ID: NA

LOGGED BY/REVIEWED BY: JF/LF

DRILLING DATES: 8/23/2012 - 8/23/2012

NOTES:
Air-knifed from 0 to 5 feet bgs due to refusal. Unable to hand auger more than 3 inches beyond 5 feet bgs.

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LOG OF BORING ROW-6

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Two layers of concrete (each 8 inches thick).						
			SANDY GRAVEL: dense, dark brown, moist, sandy GRAVEL with some silt. (Fill) No odor.		3.0				ROW-7/3 NWTPH-Gx, BTEX
5		SM	SILTY SAND: medium dense, brown and yellowish brown, moist, silty SAND with some fine gravel.						
		ML	SANDY SILT: medium stiff, brown, moist, sandy SILT with disseminated rounded gravel.		3.7				ROW-7/6 Hold
					4.2				ROW-7/8 NWTPH-Gx, BTEX
		GM	SILTY GRAVEL: dense, brown, moist, silty fine to coarse rounded GRAVEL with some sand.						
10		ML	SILT: stiff to very stiff, brown SILT with some clay and disseminated gravel and cobbles.		6.4				ROW-7/10 NWTPH-Gx, BTEX
					3.3				ROW-7/14 NWTPH-Gx, BTEX
15			End of boring at 14 feet bgs due to refusal.						
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/24/2012 - 8/24/2012

NOTES:
Air-knifed from 0 to 6 feet bgs due to refusal. Hand augered to refusal at 7 feet bgs.

Plaid Pantry #324
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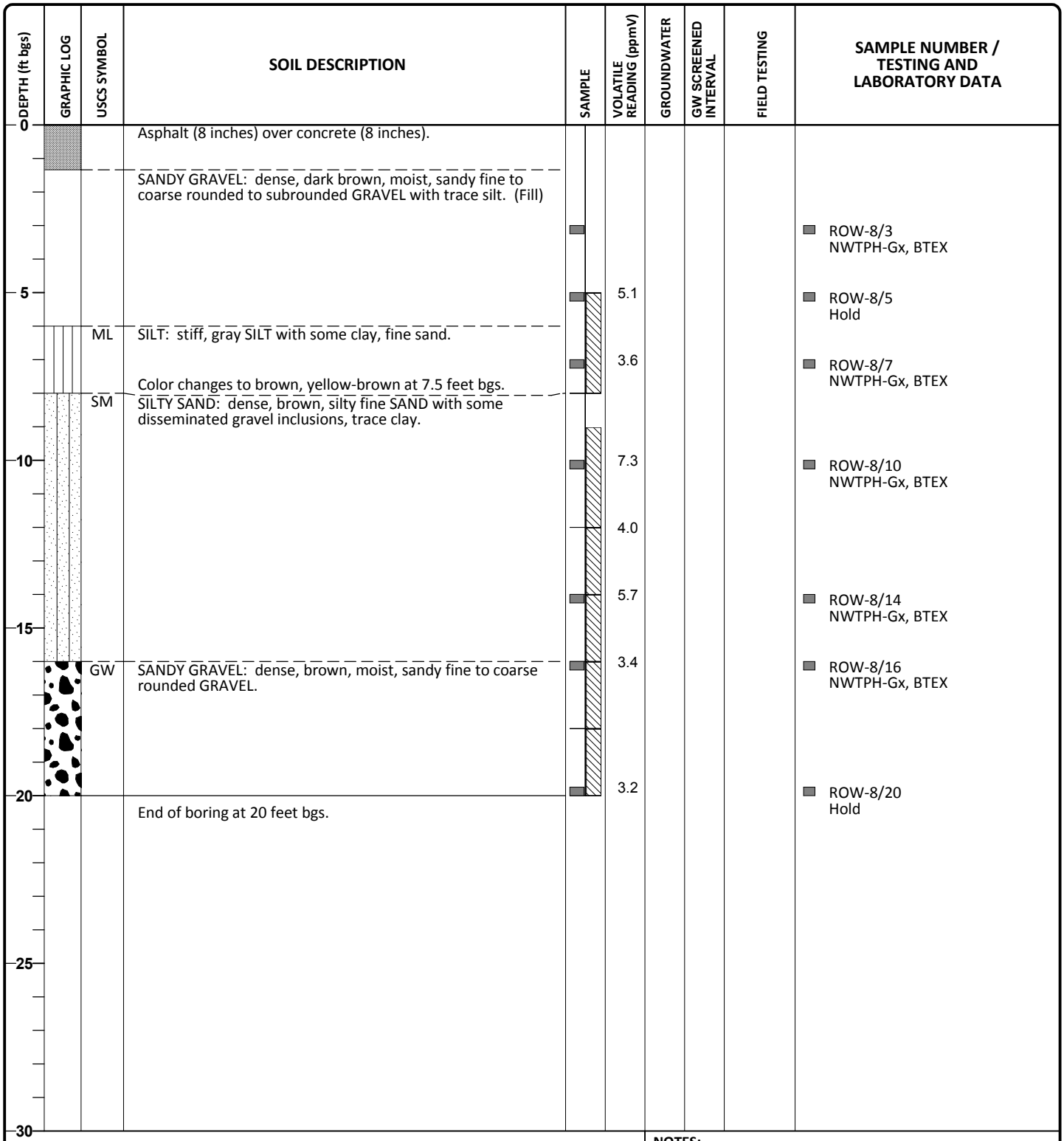
LOG OF BORING ROW-7



BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

ELEVATION REFERENCE: NA

DRILL RIG: AMS 9630

GROUND SURFACE ELEVATION: NA

CONTRACTOR: ESN

START CARD/TAG ID: NA

LOGGED BY/REVIEWED BY: JF/LF

DRILLING DATES: 8/24/2012 - 8/24/2012

NOTES:
Air-knifed from 0 to 4.5 feet bgs due to refusal on very large cobble. Hand augered to refusal at 5 feet bgs.

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LOG OF BORING
ROW-8

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches) over concrete (8 inches).						
			SANDY GRAVEL: dense, dark brown, sandy fine rounded to subrounded GRAVEL. (Fill)		2.6				ROW-9/3 NWTPH-Gx, BTEX
5		ML	CLAYEY SILT: stiff, brown, clayey SILT with trace disseminated fine rounded gravel.		3.4				ROW-9/7 NWTPH-Gx, BTEX
			Gray from 7 to 7.5 feet bgs.		5.2				
			Trace clay, some fine sand.						
10					2.4				ROW-9/10 NWTPH-Gx, BTEX
			Very stiff to hard.						
			Sand content decreases.		2.4				
			Dark brown, sandy with trace clay.						
15		GW	SANDY GRAVEL: dense, brown, moist, sandy fine to coarse rounded to subrounded GRAVEL. No odor.		3.6				ROW-9/15 NWTPH-Gx, BTEX
					4.1				
					1.7				ROW-9/19 Hold
20			End of boring at 19 feet bgs.						
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/24/2012 - 8/24/2012

NOTES:
Air-knifed from 0 to 5 feet bgs due to refusal. Hand augered to 7 feet bgs.

Plaid Pantry #324
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Portland, Oregon 97227
Tel (503) 847-2740

LOG OF BORING ROW-9

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	VOLATILE READING (ppmV)	GROUNDWATER	GW SCREENED INTERVAL	FIELD TESTING	SAMPLE NUMBER / TESTING AND LABORATORY DATA
0			Asphalt (8 inches) over concrete (8 inches).						
		ML	SILT: stiff, brown SILT with disseminated gravel.		1.0				ROW-10/3 NWTPH-Gx, BTEX
5			Becomes gravelly.						
		ML	SANDY SILT: medium stiff, brown, moist, sandy SILT.		3.0				
			Becomes gray. No odor.		1.9				
			Becomes stiff, brown, disseminated rounded gravel. Fine sand content increases slightly.		1.6				ROW-10/8 NWTPH-Gx, BTEX
10			Very stiff. Sand content decreases to some fine sand (20-30%).		0.8				ROW-10/10 NWTPH-Gx, BTEX
					3.8				
		GW	SANDY GRAVEL: dense, brown, moist, sandy fine to coarse rounded to subrounded GRAVEL, little to no fines. No odor.		4.2				ROW-10/13 Hold
15			End of boring at 15 feet bgs.		6.5				ROW-10/15 NWTPH-Gx, BTEX
20									
25									
30									

BORING METHOD: Air-knife/Direct Push

BOREHOLE DIAMETER: 1.75 (in)

DRILL RIG: AMS 9630

CONTRACTOR: ESN

LOGGED BY/REVIEWED BY: JF/LF

ELEVATION REFERENCE: NA

GROUND SURFACE ELEVATION: NA

START CARD/TAG ID: NA

DRILLING DATES: 8/24/2012 - 8/25/2012

NOTES:
Air-knifed from 0 to 5 feet bgs due to refusal. Hand augered to refusal at 6 feet bgs.

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Seattle, WA 98146

E-1133-01

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LOG OF BORING
ROW-10

Appendix B: Laboratory Analytical Reports

ESN NORTHWEST CHEMISTRY LABORATORY

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

EES
Plaid Pantry Store 324 PROJECT
Client Project #E1133-01
Seattle, WA

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	96
LCS	8/22/2012	8/22/2012	85%	108%	114%	105%	---	116
LCSD	8/22/2012	8/22/2012	79%	94%	94%	90%	---	108
ROW - 1/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	103
ROW - 1/9	8/22/2012	8/22/2012	nd	nd	nd	nd	**67**	95
ROW - 1/15	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	103
ROW - 2/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	101
ROW - 2/3 DUP	8/22/2012	8/22/2012	---	---	---	---	nd	103
ROW - 2/10	8/22/2012	8/22/2012	nd	nd	**0.24**	**0.28**	**203**	96
ROW - 2/18	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	100
ROW - 3/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	114
ROW - 3/9	8/22/2012	8/22/2012	nd	nd	nd	nd	**35**	104
ROW - 3/12	8/22/2012	8/22/2012	nd	nd	nd	nd	**297**	91
ROW - 3/18	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	116
Reporting Limits			0.02	0.05	0.05	0.15	10	

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS : 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

EES
Plaid Pantry Store 324 PROJECT
Client Project #E1133-01
Seattle, WA

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	106
LCS	8/22/2012	8/22/2012	96%	113%	118%	115%	---	107
LCSD	8/22/2012	8/22/2012	93%	102%	106%	101%	---	103
ROW - 2/16	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	110
ROW - 7/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	105
ROW - 7/8	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	114
ROW - 7/10	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	107
ROW - 7/14	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	104
ROW - 8/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	101
ROW - 9/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	114
ROW - 10/3	8/22/2012	8/22/2012	nd	nd	nd	nd	nd	112
Reporting Limits			0.02	0.05	0.05	0.15	10	

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS : 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
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lab@esnnw.com

EES
Plaid Pantry Store 324 PROJECT
Client Project #E1133-01
Seattle, WA

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	94
LCS	8/23/2012	8/23/2012	70%	90%	94%	86%	---	123
LCSD	8/23/2012	8/23/2012	86%	120%	129%	122%	---	135
ROW - 1/10	8/23/2012	8/23/2012	nd	nd	**1.6**	**3.9**	**780**	92
ROW - 4/3	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	104
ROW - 4/10	8/23/2012	8/23/2012	nd	nd	**0.07**	nd	**260**	101
ROW - 4/11	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	107
ROW - 4/15	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	107
ROW - 5/3	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	122
ROW - 5/10	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	117
ROW - 5/15	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	102
ROW - 5/15 DUP	8/23/2012	8/23/2012	---	---	---	---	nd	99
ROW - 6/3	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	100
ROW - 6/8.5	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	106
ROW - 6/10	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	103
ROW - 6/16	8/23/2012	8/23/2012	nd	nd	nd	nd	nd	108
Reporting Limits			0.02	0.05	0.05	0.15	10	

Note: Result for gasoline in sample ROW - 1/10 was taken from diluted ananlysis (10x)

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS : 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

EES Consulting
Plaid Pantry Store 324 PROJECT
Client Project #E1133-01
Seattle, WA

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	105
LCS	8/24/2012	8/25/2012	85%	108%	114%	105%	---	98
LCSD	8/24/2012	8/25/2012	88%	84%	87%	87%	---	93
ROW - 8/7	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	105
ROW - 8/10	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	93
ROW - 8/14	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	103
ROW - 8/14 Duplicate	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	102
ROW - 8/16	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	107
ROW - 9/7	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	105
ROW - 9/10	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	104
ROW - 9/15	8/24/2012	8/25/2012	nd	nd	nd	nd	nd	100
Reporting Limits			0.02	0.05	0.05	0.15	10	

"---" Indicates not tested for component.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS : 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

EES Consulting
Plaid Pantry Store 324 PROJECT
Client Project #E1133-01
Seattle, WA

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Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	8/25/2012	8/26/2012	nd	nd	nd	nd	nd	105
LCS	8/25/2012	8/26/2012	106%	98%	101%	98%	---	98
LCSD	8/25/2012	8/26/2012	103%	100%	94%	102%	---	92
ROW - 10/8	8/25/2012	8/26/2012	nd	nd	nd	nd	nd	111
ROW - 10/10	8/25/2012	8/26/2012	nd	nd	nd	nd	nd	101
ROW - 10/15	8/25/2012	8/26/2012	nd	nd	nd	nd	nd	99
ROW - 10/15 Duplicate	8/25/2012	8/26/2012	nd	nd	nd	nd	nd	103
Reporting Limits			0.02	0.05	0.05	0.15	10	

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