BASELINE ENVIRONMENTAL SUMMARY

FORMER CASCADE LAUNDRY
205 PROSPECT STREET
WHATCOM COUNTY PARCEL 380330111249
BELLINGHAM, WASHINGTON 98225
ECOLOGY FS ID: 21786898

For:
Sonja Max and Oliver Max
914 12th Street
Bellingham, Washington 98225

By:

Stratum Group
PO Box 2546
Bellingham, WA 98227
(360) 714-9409

March 12, 2015

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Stratum Group

PO Box 2546, Bellingham, WA 98227
Phone: (360) 714-9409

March 12, 2015

Sonja Max and Oliver Max
914 12th Street
Bellingham, Washington 98225

Re: Baseline Environmental Summary
Cascade Laundry
205 Prospect Street
Whatcom County Parcel 380330111249
Bellingham, Washington 98225
Ecology FS ID: 21786898

Dear Ms. Max and Mr. Max:

This report compiles environmental data regarding previous tank removal and soil and groundwater sampling as well as indoor air quality data and sump testing and ground penetrating radar studies that were recently completed at the Cascade Laundry site in Bellingham, Washington. This purpose of this report is to synthesize the numerous environmental reports and data for the site into one document to provide a baseline of site knowledge for future evaluations and/or cleanup actions.

The Cascade Laundry site is currently listed as a contaminated site with Washington State Department of Ecology. The site is listed as having soil and groundwater contamination due to petroleum products and tetrachloroethylene, a dry cleaning solvent.

Should you have any questions concerning this report, please do not hesitate to contact us at (360) 714-9409.

Sincerely,
Stratum Group

Kim Ninnemann

Dan McShane

Kim Ninnemann, B.S., L.G.
Licensed Geologist

Dan McShane, M.Sc., L.E.G.
Licensed Engineering Geologist

1.0 EXECUTIVE SUMMARY

Soil and groundwater conditions at the former Cascade Laundry site have been collected during various previous site investigations and during underground storage tank removals. In addition to this previous work Stratum Group recently completed indoor air quality sampling and tested soil and water in a sump at the site. The purpose of this report is to synthesize all of the previous environmental investigations that have been completed on the site into one document to provide a baseline of site knowledge for informing future evaluations and/or cleanup actions.

The Cascade Laundry site is located in downtown Bellingham. The site was developed as a dry cleaning and laundry facility by at least 1932, which included clothes dying and leather tanning. The site conducted dry cleaning activities through 1971. Commercial laundry continued at the site through the early 2000s.

A summary of environmental conditions on the site identified through review of available environmental investigations is provided below:

1. Three underground storage tanks (USTs) have previously been located on the Cascade Laundry property for storage of heating oil, gasoline and dry cleaning solvent. No contamination has been identified during soil sampling around the tanks. A ground penetrating radar completed on the site in February 2015 found no indications of any additional tanks.

2. Soil beneath the southern and western portions of the site exceed MTCA Method A cleanup levels for gasoline, diesel/oil, benzene, ethylbenzene, xylenes, and tetrachloroethylene (PERC), including beneath the southern portion of the building. Depth of contamination varies from surface soils to depths of 30 feet.

3. Groundwater samples collected via push probe sampling methods beneath the southern and western portions of the site exceed MTCA Method A cleanup standards for gasoline, benzene, and/or PERC, including beneath the southern portion of the building. Groundwater was encountered at depths ranging from 12 to 17 feet below the surface.

4. Diesel and oil contaminated sediment and water are present in the sump within the southwestern room of the building.

5. Detections of volatile organic compounds were identified within the indoor air of the building. Our evaluation of the data indicates that the air quality meets worker safety levels per Washington State Labor and Industries permissible exposure limits; however, the data is inconclusive as to whether the detections of the volatile organic compounds are due to vapor intrusion from the underlying impacted soil and groundwater, indoor sources or from ambient outdoor air.

Based upon our review of previous sampling results, recommendations are made to further evaluate the groundwater conditions at the site, identify whether vapor intrusion sources are present on the site, and determine site specific cleanup standards. This additional information will guide the decisions regarding cleanup options and approaches for the property.

2.0 SITE DESCRIPTION

2.1 Site Name and Identification

Cascade Laundry
205 Prospect Street
Whatcom County Parcel 380330111249
Bellingham, Washington 98225
Ecology Fs Id: 21786898

2.2 Site Owner

Sonja Max and Oliver Max
914 12th Street
Bellingham, Washington 98225

2.3 Site Occupant

The property is currently vacant.

2.4 Site Location

The Cascade Laundry site is located along the west side of Prospect Street between Flora Street and Central Avenue in the downtown area of Bellingham, Washington. The site occupies one tax parcel that utilizes the address of 205 Prospect Street. The property is located in the northwest quarter of the southwest quarter Section 30, Township 33 North, Range 3 West of Willamette Meridian. The location of the subject property is indicated in Figure 1.

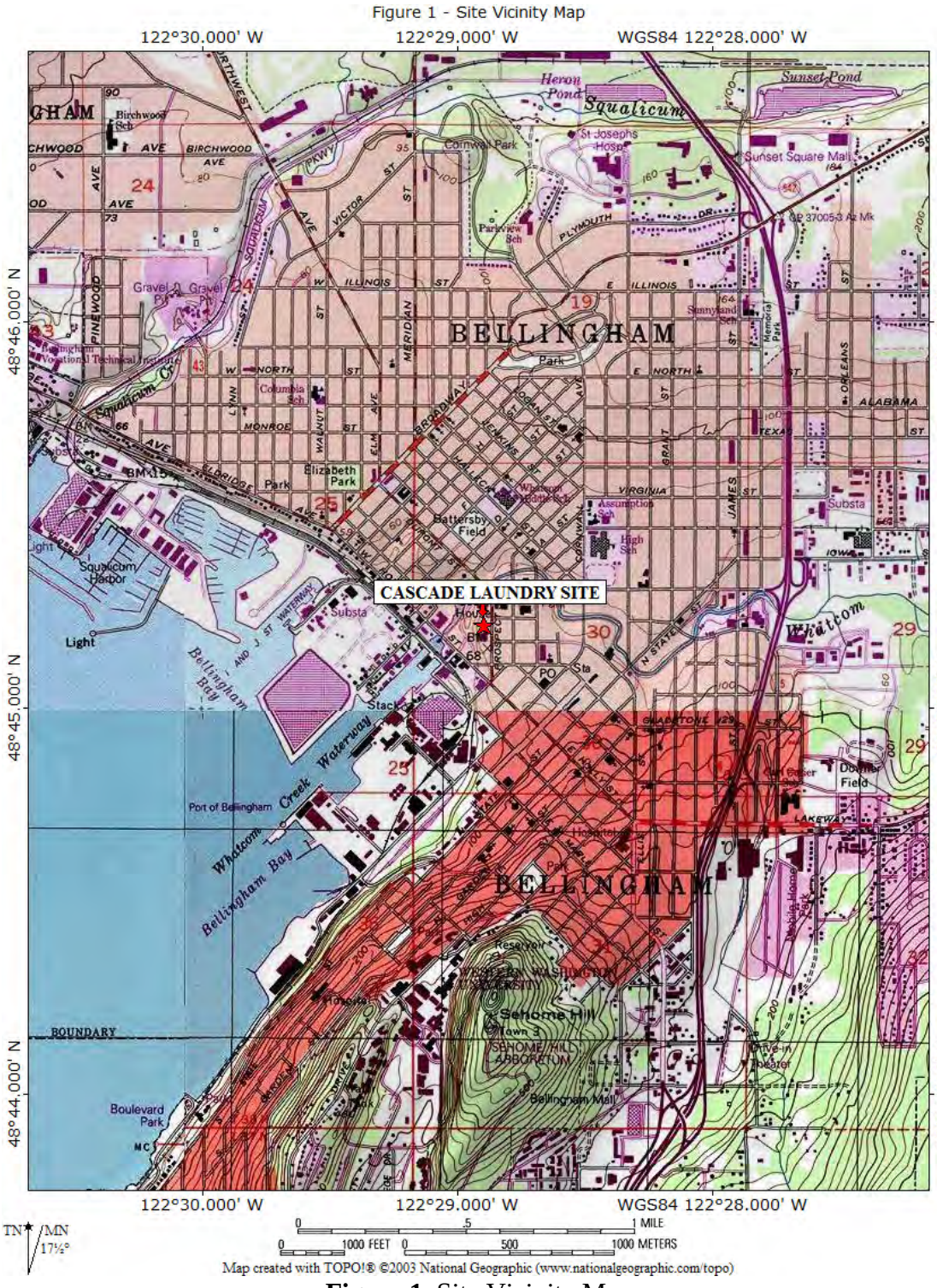


Figure 1. Site Vicinity Map

2.5 General Characteristics of Site

An aerial photograph with the site layout and adjacent properties is provided below in Figure 2.

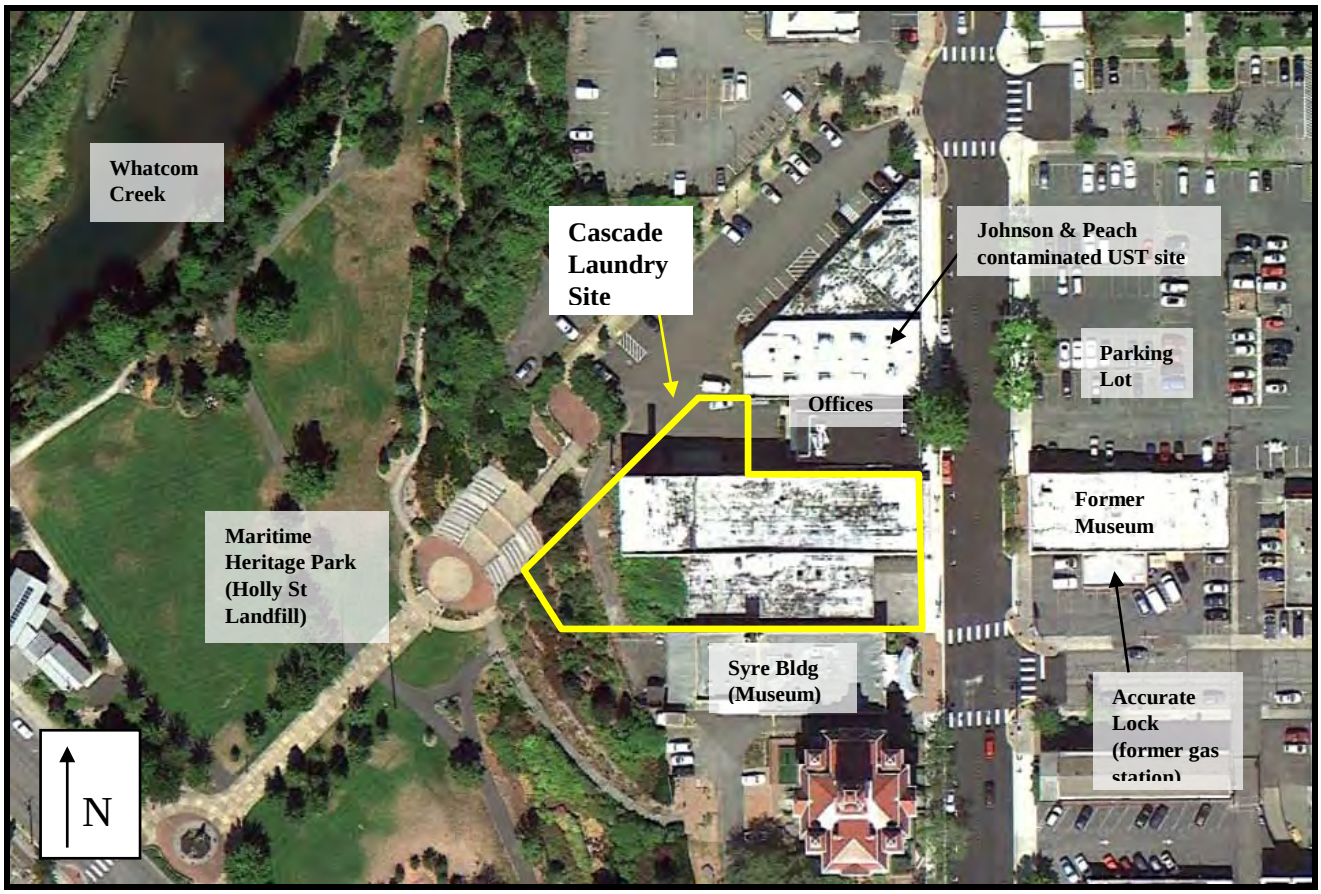


Figure 2. Aerial photo of site and surrounding land uses

The subject property consists of one tax parcel that is approximately 0.54 acres in size and is irregularly shaped. The site is developed with one building. The building has a footprint that covers approximately 13,150 square feet. The building has a second story, main floor, and basement. The building is currently vacant.

The subject property slopes gently to the west. The slope of the property increases toward the western property boundary, with a steep former shoreline slope along and adjacent to the western property boundary. The slope is vegetated and is approximately 35 feet high. The site has an elevation of approximately 65 feet along Prospect Street and approximately 55 feet along its western boundary. Whatcom Creek estuary is located approximately 320 feet to the northwest and Whatcom Waterway is located approximately 500 feet west of the subject property.

An asphalt paved parking area and driveway are located on the southeastern corner of the property and provides access to the site from Prospect Street. A second paved access extends along the

western property boundary. This western access road is accessed from Prospect Street from several properties to the north and skirts along the top of the vegetated slope, as an extension of Central Avenue. A vegetated, fill area is located just south of the western end of the building.

2.6 Adjacent and Surrounding Land Use

The site is located within downtown Bellingham, Washington. The land use in the vicinity is largely commercial with some government offices and a historic museum.

A paved parking area, and a building utilized by a variety of offices bound the subject property to the north. The building, located at 209 Prospect Street, immediately north of the subject property shares a common wall with the subject property. Prospect Street bounds the subject property to the east. A small building utilized by Accurate Lock (200 Prospect Street) and a larger building that was formerly utilized as part of the Whatcom County Museum (206 Prospect Street) are located across Prospect Street from the subject property. The Accurate Lock property is a former gasoline station. The Syre Building, utilized by the Whatcom County Museum, bounds the subject property to the south. A vegetated slope and Maritime Heritage Park bound the subject property to the west. A portion of Maritime Heritage Park was utilized as a part of a municipal landfill in the 1940s and 1950s, known as the Holly Street Landfill.

3.0 SITE HISTORY

The subject property and vicinity was initially developed in approximately the 1850s as it is located near the earliest area of development along Bellingham Bay. A saw mill was built along the banks of Whatcom Creek to take advantage of the water power provided by the creek. An 1892 photograph of the site and vicinity indicates that a home was located on the subject property at that time. The main structure of the current building was constructed on the site in 1922. The southern portion of the subject property was utilized as a car sales lot until approximately 1935.

Cascade Laundry began to utilize the subject property by at least 1932. An addition was added to the south side of the building in the 1966. Cascade Laundry utilized the building for cleaning clothing, rugs, and miscellaneous goods, dry cleaning, and dyeing fabric. The year that the dry cleaning operation began is unknown but is believed to have ended by 1971. The site remained in use as a laundry facility through the early 2000s.

Copies of historic aerial photographs and Sanborn Fire Insurance Maps of the site and vicinity are provided in Appendix I.

4.0 ENVIRONMENTAL SETTING

4.1 Site Geology and Soils

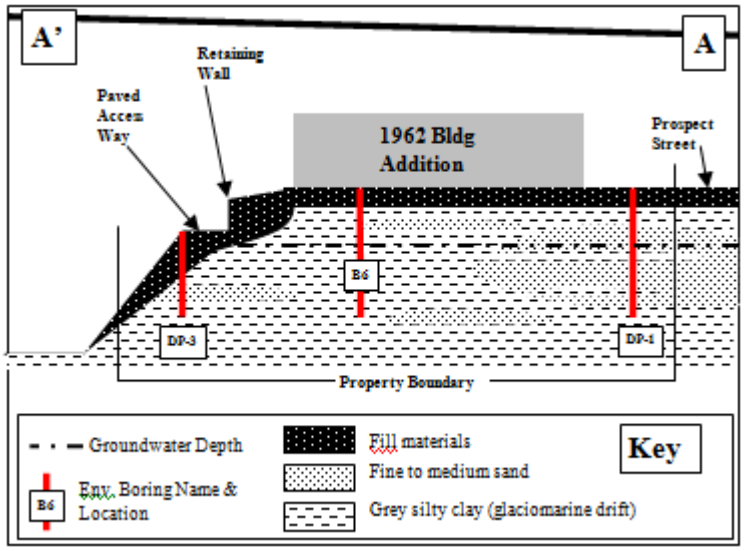
The following descriptions of the surficial deposits in the vicinity of the subject property were interpreted from the *Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington* (Lapen, 2000). According to Lapin (2000), the subject property is underlain by Bellingham glaciomarine drift. The Bellingham Drift was deposited by melting glacial ice near the end of the last glacial period when the area was submerged below sea level. The Bellingham Drift generally consists of silty clay.

Soil data available for Whatcom County through the National Resources Conservation Service of the USDA (online version 2014) describes the soils on the property as urban land. Due to the presence of buildings no soil data was available.

Numerous environmental borings have been completed on the subject property to depths of up to 30 feet. In addition, the Department of Ecology indicates that one well log is on file for the property. Based upon the boring logs for the site, the underlying geology generally consists of silty clay, clayey silt, sandy clay and sandy silt to depths of up to 30 feet. Layers of sand were identified in numerous borings. The sand units vary from 2 to 14 feet thick and some sandy zones have lenses of clay.

Fill material was identified in some of the borings on the west side of the property and included organic material and pieces of glass and charcoal. Fill is also located at the southwestern corner of the building, east of a concrete retaining wall. The fill material at this location was largely comprised of loose brown silty sand. Some bricks, pipes, and other miscellaneous debris were observed within the fill material. Organic material, woody debris, and some brick fragments were identified in the upper 7 feet along the top of the slope, near the western property boundary.

A conceptual cross-section of the site's geology, based upon the information available in the environmental borings logs is provided in Figure 3.



vertical exaggeration of 1:1.5

Figure 3. Cross-section with general site geology

4.2 Site Hydrology

No streams or surface water drainages are located on the subject property. The site is located approximately 550 feet east of the Whatcom Waterway and includes the upper portion of the original shoreline bluff above the creek estuary. No groundwater seeps have been observed along the bluff.

An environmental investigation completed on the site in 2011 identified groundwater between depths of 12 to 17 feet within sandy lenses with groundwater present in coarser grained layers below 17 feet depth (Whatcom Environmental, 2011). An environmental investigation on the site in 2007, with four borings to depths of up to 27 feet, identified groundwater in only one of the borings at a depth of 12 feet (GeoEngineers, 2007). Based upon this data, seasonal perched groundwater is present at the site possibly at various depths within discrete more porous zones. The groundwater is not likely representative of a regional groundwater table. Based upon the presence of the groundwater within coarser grained layers in the subsurface, the perched groundwater likely has a low flow and recharge rate, but details of groundwater conditions are not fully known.

Our review of groundwater sampling reports for the adjacent Maritime Heritage Park site, located on the adjacent property to the west (also known as Holly Street landfill) indicates that groundwater is present on the park site at 12 to 13 feet below the ground surface. These groundwater levels correspond with a groundwater depth of approximately 43 feet below the ground surface at the subject property. Groundwater flow direction of groundwater at the monitoring wells within the park indicates flow to the northwest, toward Whatcom Creek (Landau, 1993).

4.3 Drinking Water

Cascade Laundry is located within the downtown area of Bellingham, Washington. All residences and commercial properties in the vicinity are served by the public City of Bellingham drinking water utility. No drinking water wells are located within ½ mile of the subject property. No drinking water wells are located down gradient of the subject property.

4.4 Sensitive Environments

Whatcom Creek is located approximately 320 feet northwest of the property where the creek transitions into an estuary via Whatcom Waterway and its connection to Bellingham Bay to the west approximately 500 feet west of the property. Both the creek and bay are considered sensitive environments.

The Holly Street landfill, a municipal landfill, operated on the adjacent property to the west from 1937 until 1957-1959. The landfill separates the subject property from the waterways. The landfill was created by filling tide flats and Whatcom Creek estuary. Debris in the landfill is largely described as sandy silts with inorganic materials such as glass, concrete, household debris, scrap metal, soil, coal slag, ashes, woody debris. Some previous waste disposal likely took place in this area prior to the site use as a landfill particularly along the bluff slopes.

5.0 Previous Environmental Studies

Several environmental investigations have taken place on the site. The documents include tank closure information available through Department of Ecology, a tank removal report from 2010, and reports from four soil and groundwater sampling events that took place between 2006 and 2011.

Copies of the referenced documents are provided in Appendix III.

5.1 Underground Storage Tank History

The site is listed as an underground storage tank site with Washington State Department of Ecology. Three underground tanks are confirmed in association with the site. The tanks include a 500-gallon gasoline tank, a 3,200-gallon heating oil tank, and a 300-gallon dry cleaning/PERC tank. All three tanks have been permanently closed-in-place or have been removed.

No active tanks are located on the site. The gasoline UST was located along the west side of the building, the heating oil UST was located along the northwest exterior wall of the building, and the dry cleaning tank was located along the southwestern exterior wall of the building. The approximate locations of the USTs are presented in Figure 4.

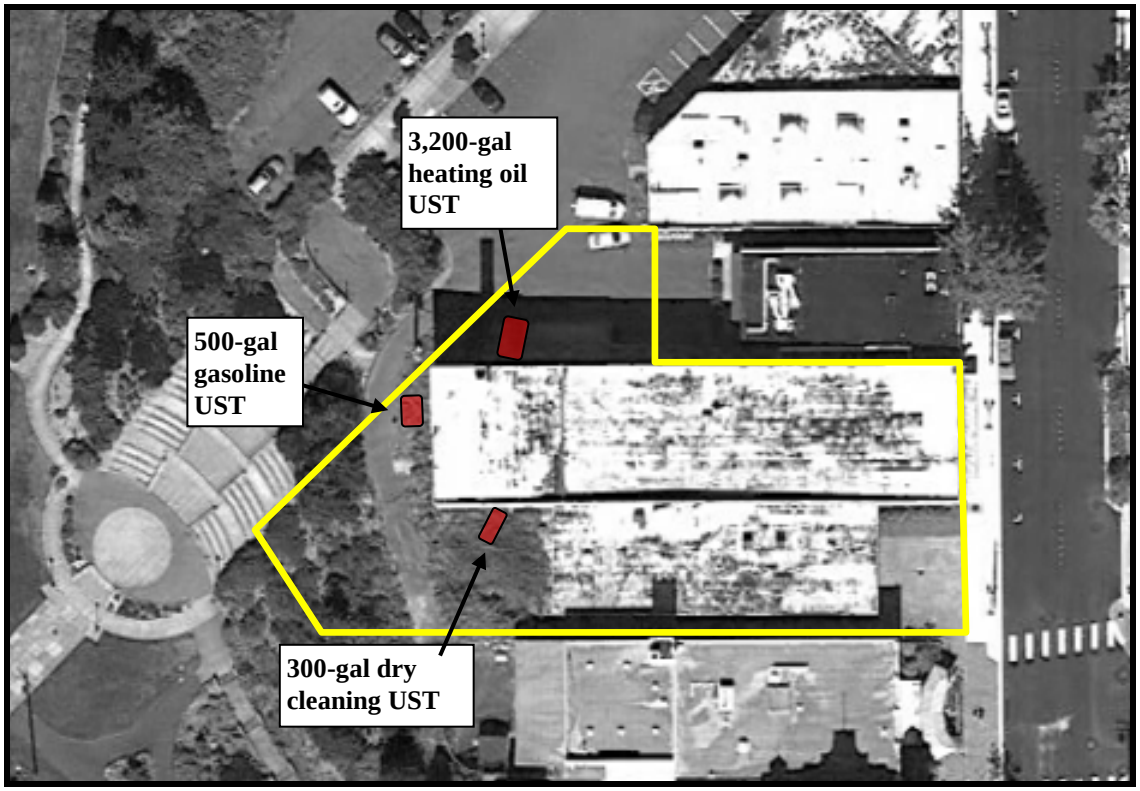


Figure 4. Onsite tank locations

A summary of the tank status, based upon environmental reports and Ecology information is provided in Table 1, below.

Table 1. Summary of USTs

	Tank Size (gallons)	Tank Contents	Tank Status	Installation Date	Removal Date
1	300	PERC (dry cleaning tank)	Removed	Unknown	2010
2	3,200	Bunker C fuel oil	Removed	Unknown	2010
3	500	Gasoline	Closed-in-Place	1978	1992

The reports that describe the tank closures are described below.

Underground Storage Tank Site Check/Site Assessment Checklist (Welch, 1992)

A 500-gallon gasoline UST was permanently closed-in-place at the site by Robert H Welch (Welch Associates) on January 23, 1992. The checklist indicates that the tank had been installed in 1978. The form indicates that the site check/assessment was completed in accordance with Ecology guidance. No sampling data or figures were available to document soil conditions around the tank; however, a check box is marked that indicates that a release has not been confirmed from the UST system.

Tank Removal Report (Whatcom Environmental Services, 2010)

The dry cleaning UST (PERC) and heating oil UST were removed from the site by Whatcom Environmental Services on October 13, 2010.

The 3,200-gallon heating oil tank was located along the northwest corner of the building and had previously been used to store Bunker C fuel oil, which had been used to power the site's boilers. The tank had been abandoned and no information was available as to its last usage. The tank contained approximately 7 inches of residual oil at the time of removal. After the tank was removed, four soil samples were collected from the heating oil UST area. One sample was collected beneath the heating oil UST, two samples were collected from the sidewalls and one from the overburden materials. The samples were analyzed for diesel-range and oil-range petroleum, benzene, toluene, ethylbenzene, and xylenes (BTEX), and metals. All of the samples of residual soils were non-detect for all analytes, except for the presence of oil-range petroleum at a concentration of 57 mg/kg in the sample collected from the north side of the excavation at 5 feet depth. The oil concentration is well below the MTCA Method A cleanup standard of 2,000 mg/kg. One sample (from the north side of the excavation) was analyzed for metals and had detections of arsenic, chromium, mercury, and lead, but at concentrations well below the MTCA Method A cleanup standards for unrestricted land use. Based upon the results, no soil contamination that warrants further action is present around the former heating oil tank. No groundwater was encountered to depths of eight feet, where the sample was collected from below the

former bottom of the tank location.

A map of the soil samples collected around the former heating oil UST is provided in Figure 5.

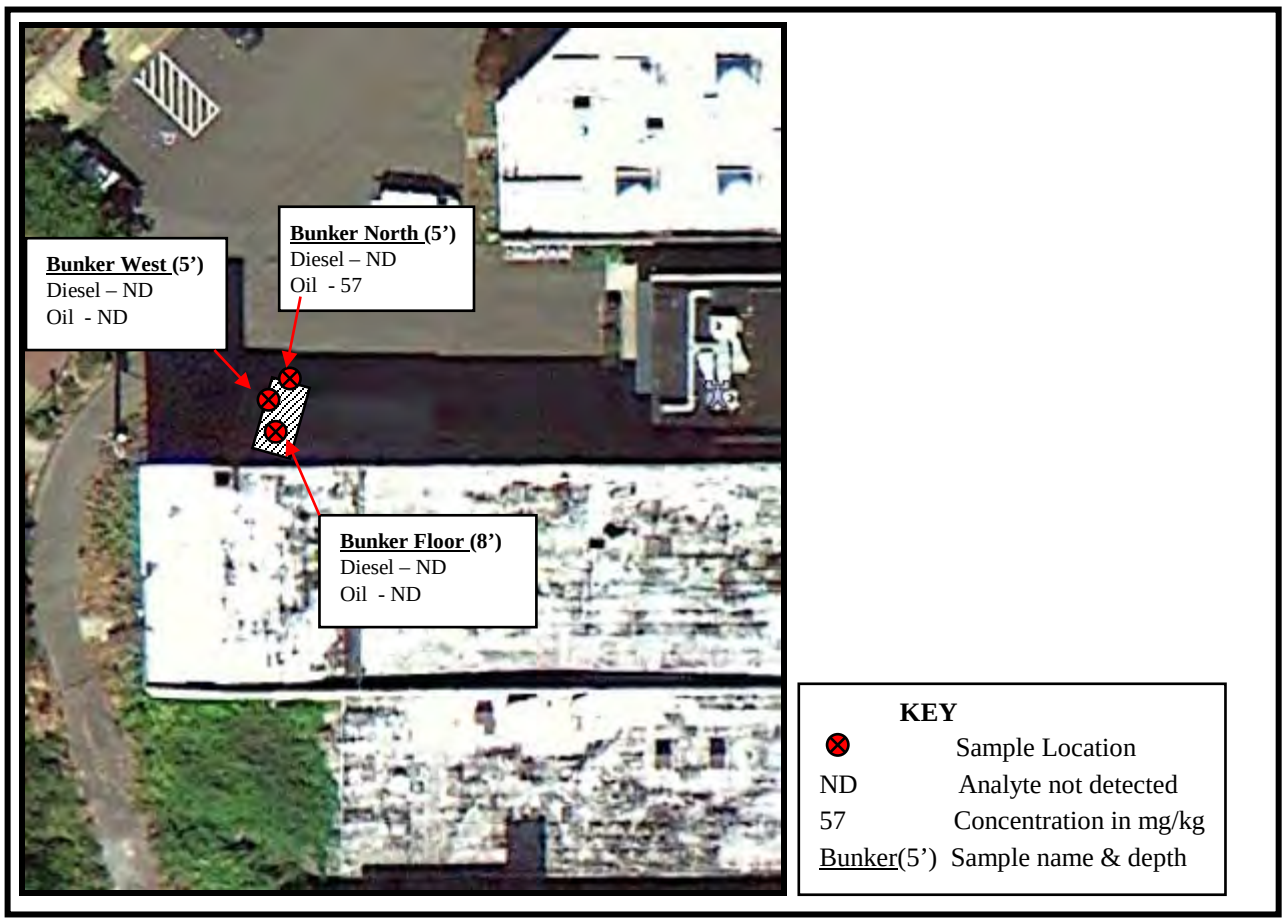


Figure 5. Sample results from heating oil UST removal

The 300-gallon dry cleaning tank is referenced by Whatcom Environmental Services to have contained PERC (also referred to as tetrachloroethylene), based upon the site's history and anecdotal evidence provided by the property owner. The tank was located along the southwestern side of the building, within an area of fill material. Approximately 225 gallons of water was removed from the tank prior to tank removal. Soil samples were collected from beneath the PERC UST, from two of the sidewalls and from the overburden soil that had been removed from the top of the tank. The soil samples were analyzed for gasoline-range petroleum, BTEX, and/or halogenated volatiles. The laboratory results indicate the presence of gasoline range petroleum, xylenes, and PERC at concentrations that exceed the MTCA Method A cleanup standards in the bottom and sidewalls of the excavation around the tank. Gasoline-range petroleum was detected in two samples at 820 and 1,000 mg/kg, which exceeds the MTCA Method A cleanup standard of 100 mg/kg. Xylenes were detected in two of the samples at 12 and 13 mg/kg, which exceed the cleanup standard of 9 mg/kg. The two sidewall samples and bottom sample had detections of PERC at 0.091 to 0.370 mg/kg, which exceeds

the cleanup standard of 0.05 mg/kg. No halogenated organic compounds were identified in the stockpile soil. The sampling indicates the presence of contaminated soil around the former PERC UST. No groundwater was encountered during the excavation, to a depth of 9 feet.

Soil samples collected from around the 300-gallon PERC tank are presented in Figure 6.

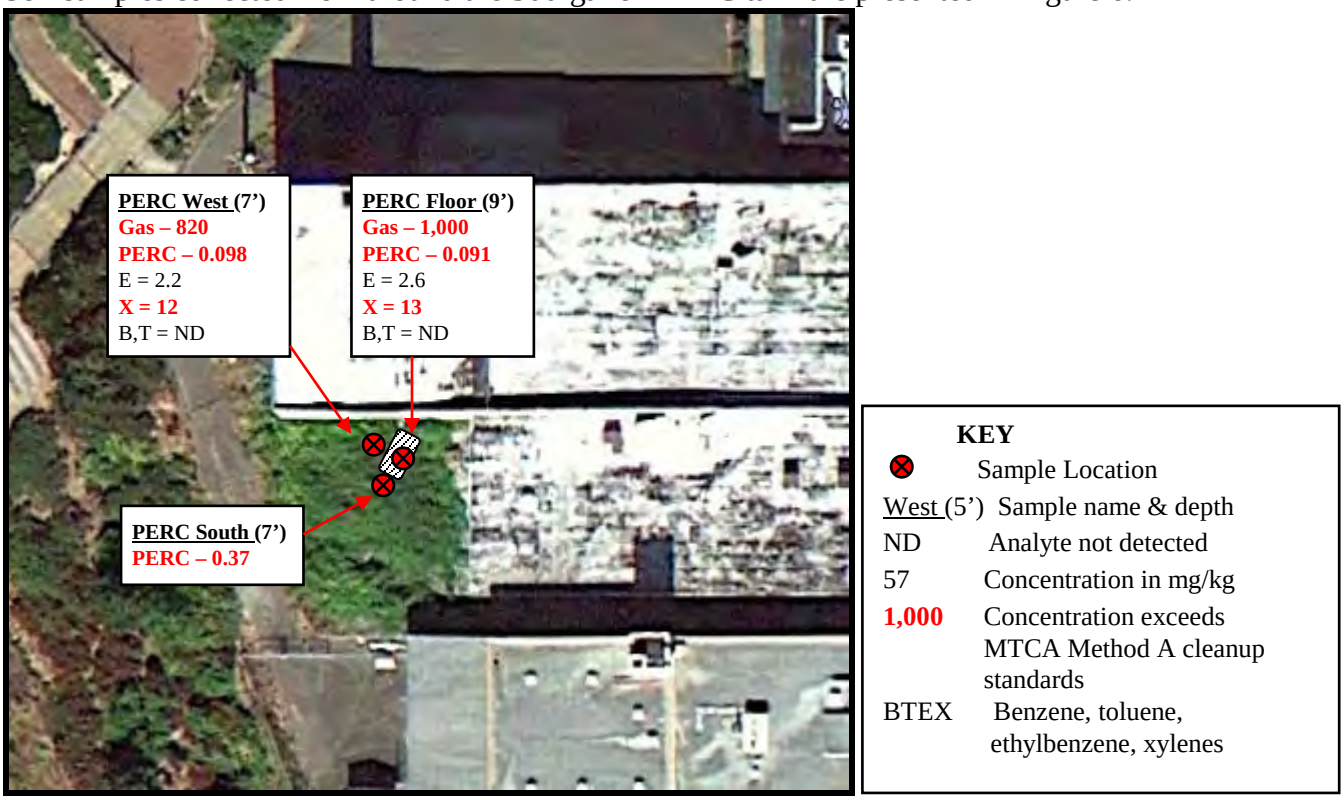


Figure 6. Sample results from dry cleaning UST removal

5.2 Soil and Groundwater Sampling History

The soil sampling events that took place from 2006 through 2012 have been compiled into Figures 7 and 8. The groundwater sampling locations are presented in Figure 9. The data from the soil samples is provided in Table 2 and the data from the groundwater samples is presented in Table 3. Figures 7 through 9 and corresponding tables can be found in the text document, below.

Phase I and Phase II Environmental Site Assessment (Stratum Group, 2006)

Stratum Group conducted environmental due diligence on the site for a prospective purchaser in April 2006. Based upon the site's long term use as a dry cleaner facility, a phase II test pit investigation was initiated. A total of five test pits were completed around the exterior portion of the site. Two test pits were completed south of the southwest portion of the building within the fill material. Underground piping was encountered in the upper excavation and an approximately 300-gallon underground storage tank was discovered within the fill material. The tank was full of

yellowish brown liquid at the time of discovery. Samples collected from test pits identified the presence of PERC at 2.1 and 0.26 mg/kg, which exceeds the MTCA Method A cleanup standard of 0.05 mg/kg. The two soil samples were collected from below the fill material retaining wall to the west. One soil sample was collected from down gradient of the heating oil UST, and two samples were collected from down gradient of the gasoline UST. These samples had low detections of oil-range petroleum and PERC. The concentrations of oil and PERC were below the MTCA Method A cleanup standards for unrestricted land use. Based upon the sampling results, PERC contaminated soil was confirmed to be present at levels above the MTCA Method A cleanup level in the fill material south of the southwestern portion of the building.

The report recommended that the two USTs that are no longer in use (heating oil and dry cleaning tank) be removed and a soil cleanup take place to remove the PERC contaminated soil within the fill material near the southwestern corner of the building.

The locations of the soil samples collected during the test pit investigation are presented in Figure 7.

Phase II Environmental Borings (GeoEngineers, 2007)

GeoEngineers completed four direct push borings (DP1- DP4) on the property on August 10, 2007. A final report was not completed; however, draft copies of the a Figure 1 site plan and surrounding property uses, log of direct push borings, and laboratory report results were reviewed to evaluate the findings. The borings were completed to depths that ranged from 24.5 to 29 feet. A total of eight soil samples and one water sample were collected from the borings. Samples were analyzed for gasoline, diesel, oil (or screened for petroleum), metals, and/or a suite of volatile organic compounds.

DP1 was completed in the southeast corner of the property, presumably up gradient of the dry cleaning activities, but down gradient of the gasoline station that formerly operated across Prospect Street. One soil sample was collected at 14 feet depth and was analyzed for gasoline-range petroleum and BTEX. No contaminants were detected. One water sample from the boring, collected at 12 feet depth, had no detections of gasoline or BTEX.

Boring DP2 was collected from the top of the slope, west of the southwest corner of the building. Soil samples were collected from 7, 15, and 29 feet depths. No contamination (petroleum, metals) was detected in the sample from 7 feet depth. Diesel, oil, and PERC were detected at 15 feet depth. Concentrations exceeded the cleanup standards with the combined diesel and oil concentration at 5,900 mg/kg, which exceeds the cleanup standard of 2,000 mg/kg. PERC was detected at a concentration of 1.1 mg/kg, which exceeds the cleanup standard of 0.05 mg/kg. Numerous volatile organic compounds were detected at 29 feet; however, only gasoline-range petroleum was detected at 110 mg/kg exceeded the cleanup standard of 100 mg/kg. No water was encountered in the boring.

Boring DP3 was completed approximately 30 feet south of DP2, along the top of the slope. Soil samples were collected from 13 and 26 feet depths. The sample from 13 feet had no petroleum or metals above the cleanup standards. The sample from 26 feet depth had numerous detections of

volatile organic compounds; however, only exceeded the cleanup standards for gasoline-range petroleum with a detection of 930 mg/kg. No ground water was encountered in the boring.

Boring DP4 was completed along the northwest side of the former gasoline UST. Samples were collected from 3.5 and 20 feet depth. The sample from 3.5 feet depth showed no contamination of petroleum or metals. The sample from 20 feet depth had a detection of gasoline-range petroleum at 380 mg/kg, which exceeds the cleanup standard of 100 mg/kg.

The laboratory reports indicated that the gasoline-range petroleum was likely mineral spirits in all the samples where it was detected. The GeoEngineers sampling event identified PERC contamination at 15 feet to the west of the building and gasoline contamination between 15 and 26 feet in Borings DP2 DP3 and DP4. Based upon the lack of groundwater in the borings west of the building to depths of 29 feet, the depth to the groundwater table is below 29 feet depth.

The soil sample locations and results are presented in Figure 6. The groundwater sample locations and groundwater results are presented in Figure 7.

Site Characterization Report (Whatcom Environmental Services, March 2011)

Five borings were extended into the fill material along the southwest corner of the building to further evaluate the extent of soil and/or groundwater contamination in that area of the site. Four borings (B-2 to B-5) were placed within the fill material and one boring (B-1) was placed just west of the retaining wall along the west side of the fill material. Seven soil samples were collected from the borings. All of the samples were collected between 17 and 30 feet depth and were analyzed for gasoline-range petroleum, BTEX, and tetrachloroethylene (PERC). Five of the soil samples had detections of gasoline-range petroleum between 730 and 1,600 mg/kg, which exceeded cleanup standards of 100 mg/kg. The exceedences ranged in depth from 14 to 25 feet. The two soil samples collected from 30 feet depth were non-detect for gasoline-range petroleum. PERC was detected in six of the seven soil samples; however, only two samples exceeded the cleanup standards. PERC was detected at 45 mg/kg at 24-25 feet depth in B-2 and 0.089 mg/kg at 30 feet in B-5, which exceed the MTCA Method A cleanup standard of 0.05 mg/kg. Xylenes were detected in five of the seven samples; however, only one sample (B3 from 17-18 feet) exceeded the cleanup standards with a concentration of 9.4 mg/kg (clean up standard is 9 mg/kg). Ethlybenzene was detected in five of the seven samples, but at concentrations that met the cleanup standards. Benzene was detected in one sample at a concentration that slightly exceeds the cleanup standard. Benzene was present at 0.048 mg/kg at 30 feet depth in B-5. Toluene was not detected in any of the soil samples.

Groundwater samples were collected from all five borings. The report indicates that groundwater was encountered between 12 and 17 feet below ground surface and that groundwater was present in sand lenses interbedded between saturated silty clay at depths below 17 feet. All five groundwater samples exceeded MTCA Method A cleanup standards for gasoline-range petroleum hydrocarbons of 800 µg/L with a detected range of 4,400 to 13,000 µg/L. Benzene was detected in four of the water samples at 14 to 49 µg/L, which exceeds the cleanup standard of 5 µg/L. PERC was detected in four

of the five samples; however, only exceeded the cleanup standard of 5 µg/L in two of the samples at 5.4 in B-3 and 3,100 µg/L in B-2. Concentrations of toluene, ethylbenzene, and xylenes in the samples were below cleanup standards. The laboratory reports that the gasoline-range detections likely contain mineral spirits. The report concluded that petroleum impacted soil was present in all five borings, PERC contaminated soil was identified in two of the borings and groundwater was contaminated in all five locations with mineral spirits (gasoline-range), benzene and/or PERC. The report indicates that PERC soil contamination appears to diminish at a depth of approximately 30 feet. PERC was not detected in the soil and/or groundwater of B-1, which is located in the inferred down gradient position relative to the fill material and dry cleaning tank area and seems to show a limit to the extent of PERC contamination; however, mineral spirits continued to be present above cleanup standard in the soil and water of B-1 and therefore the extent of mineral spirits contamination has not been defined.

The soil sample locations and results are presented in Figures 7 and 8. The groundwater sample locations and groundwater results are presented in Figure 9.

Site Characterization Report – Building Interior Soil Borings (Whatcom Environmental Services, 2012)

Whatcom Environmental oversaw the drilling of four push probe borings through the floor of the Cascade Laundry building in December 2011. Borings were completed to depths of 27 to 29 feet, where bedrock was reported encountered. Groundwater was detected in all four borings at a depth of 12 to 14 feet. Two borings (B-6 and B-7) were completed in the southern portion of the building, within the western portion of the 1962 addition. Two borings were completed in the central portion of the main building (B-8 and B-9). A total of five soil samples and three groundwater samples were collected and analyzed for gasoline-range petroleum, BTEX, and PERC. All of the soil samples were below the state cleanup standard except for gasoline-range petroleum, benzene, ethylbenzene, and xylenes in the soil of B-6 at 14.5-15.5 feet depth. All other constituents were non-detect or below cleanup standards. The groundwater quality met the state cleanup standards in B-9, but exceeded the cleanup standard for benzene and PERC in B-6 and for PERC in B-7. No groundwater was encountered in B-8. In conclusion, the report documents that gasoline and BTEX constituents were found in the soil beneath the building footprint at 14-15 feet depth and PERC was identified in the groundwater in two locations beneath the southern end of the building footprint.

The soil sample locations and results are presented in Figures 7 and 8. The soil data is presented in Table 2. The groundwater sample locations and groundwater results are presented in Figure 9 and Table 3.

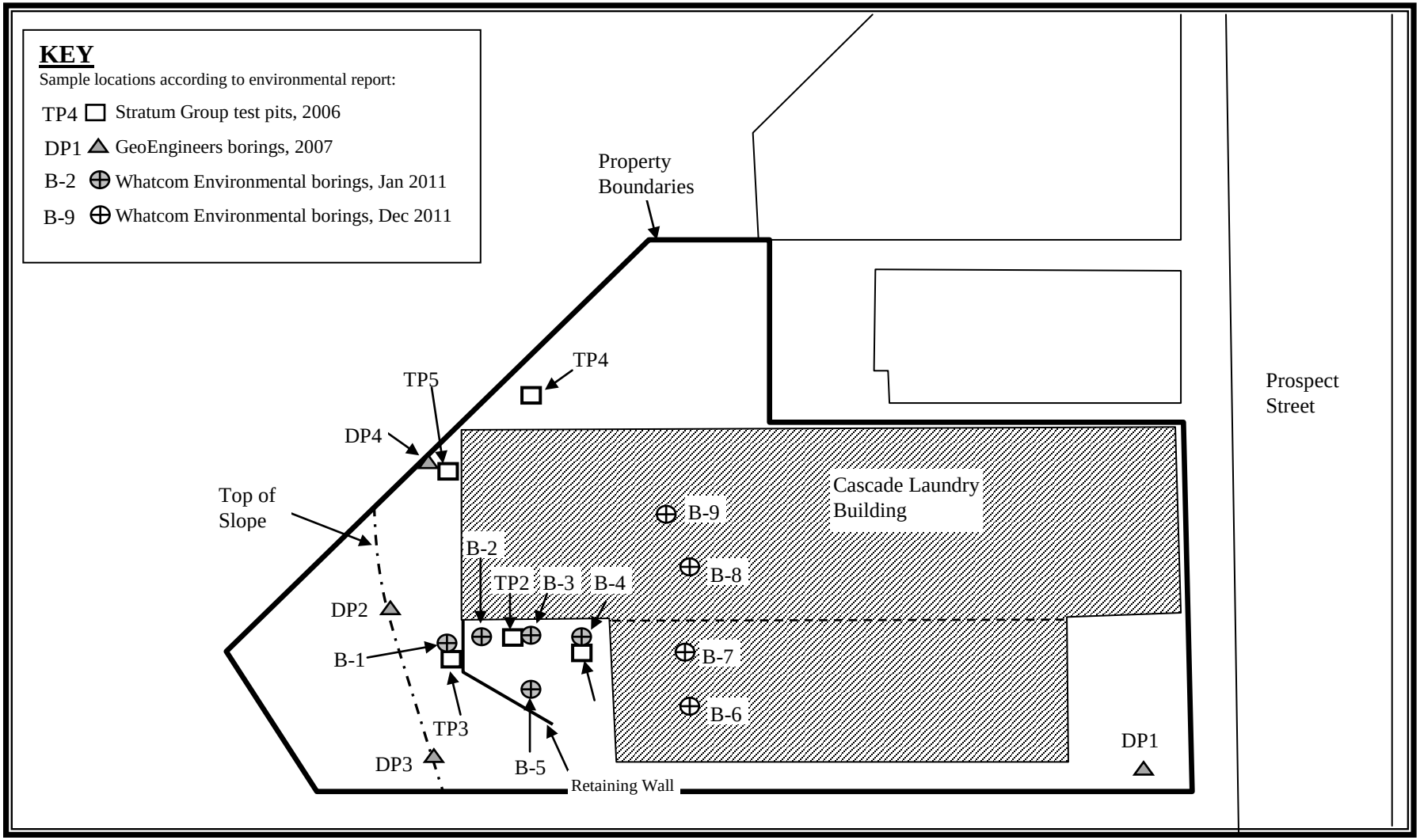


Figure 7. Compilation Map of Soil Sample Locations

March 12, 2015
Cascade Laundry, 205 Prospect Street, Bellingham, WA
Environmental Baseline

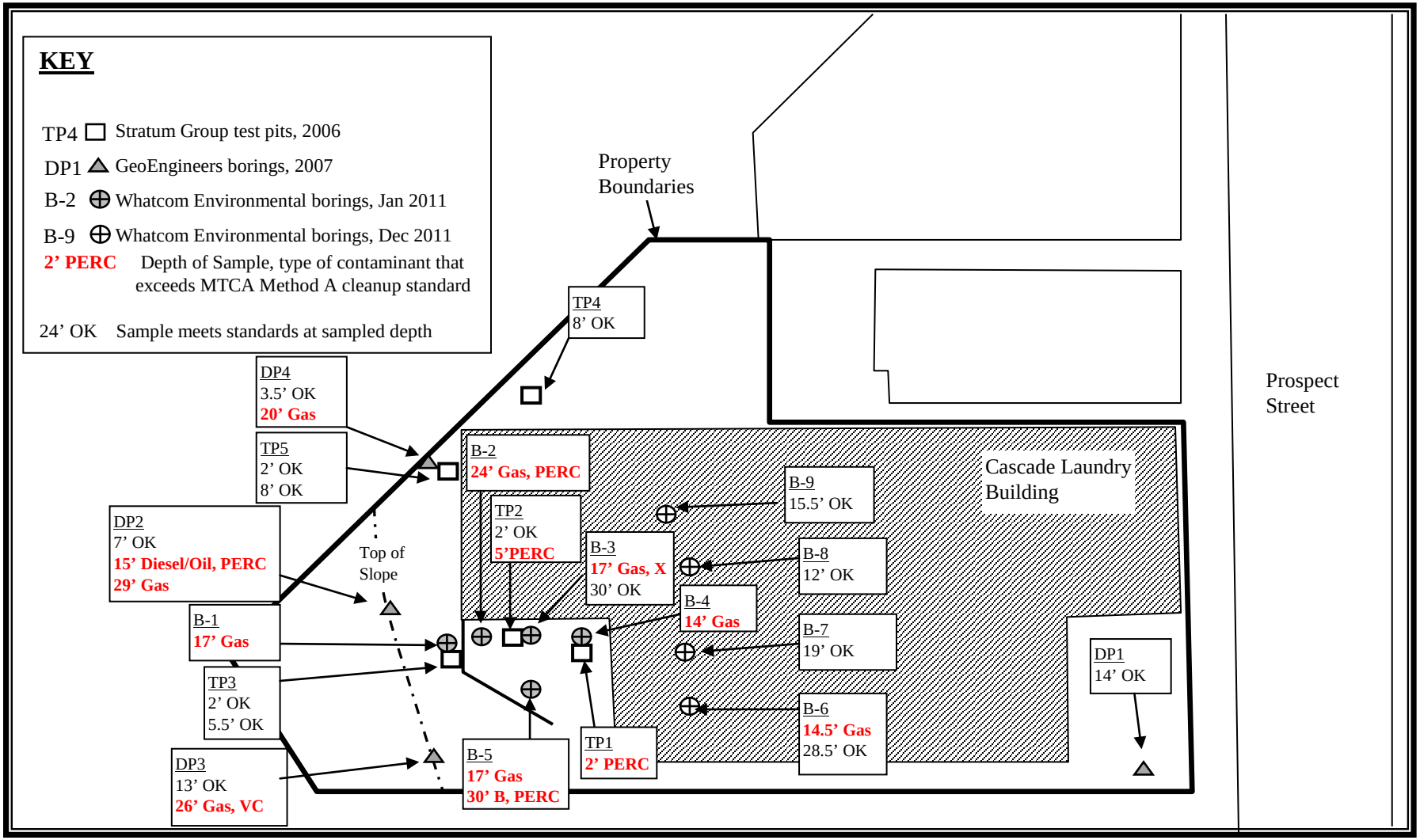


Figure 8. Soil Sample Exceedences (above MTCA Method A)

Table 2. Compilation of Soil Sample Data (2006-2012)

Sample Location		Sample Depth (feet)	Soil Contaminants (mg/kg)							
			Gas	Diesel	Oil	Benzene	Ethylbenzene	Xylenes	PERC	Vinyl Chloride
TP1	01	2	--	ND	70	--	--	--	**2.1**	ND
TP2	02	2	--	ND	ND	--	--	--	ND	ND
	03	5	--	ND	ND	--	--	--	**0.26**	ND
TP3	04	2	--	ND	84	--	--	--	0.023	ND
	05	5.5	--	ND	76	--	--	--	0.014	ND
TP4	06	8	--	ND	58	--	--	--	ND	ND
TP5	07	2	--	ND	ND	--	--	--	0.04	ND
	08	8	--	ND	ND	--	--	--	0.012	ND
DP1		14	ND	--	--	ND	ND	ND	--	--
DP2		7	ND	ND	ND	--	--	--	--	--
		15	83	**2,600**	**3,300**	ND	0.012	0.043	**1.1**	ND
		29	**110**	ND	ND	ND	ND	ND	ND	0.084
DP3		13	ND	ND	ND	--	--	--	--	--
		26	**930**	ND	ND	ND	1.2	ND	ND	**1.3**
DP4		3.5	ND	ND	ND	--	--	--	--	--
		20	**380**	ND	ND	ND	ND	ND	ND	ND
B-1		17-18	**1,500**	--	--	ND	2.9	6.8	0.029	--
B-2		24-25	**1,200**	--	--	ND	2.2	4.5	**45**	--
B-3		17-18	**1,300**	--	--	ND	4.0	**9.4**	0.038	--
B-3		30	ND	--	--	ND	ND	ND	0.024	--
B-4		14-15	**730**	--	--	ND	1.0	2.0	ND	--
B-5		17-18	**1,600**	--	--	ND	3.7	5.8	0.021	--
B-5		30	ND	--	--	**0.048**	ND	ND	**0.089**	--
B-6		14.5	**870**	--	--	**7.2**	2.1	**16**	**16**	--
B-6		28.5	ND	--	--	ND	ND	ND	ND	--
B-7		19	ND	--	--	ND	ND	ND	ND	--
B-8		12	ND	--	--	ND	ND	ND	ND	--
B-9		15.5	ND	--	--	ND	ND	ND	ND	--
MTCA Method A (mg/kg)			***30/100***	***2,000***		***0.03***	***7***	***9***	***0.05***	*--*
MTCA Method B (mg/kg)			***Not available***	***Not available***		***320***	***800***	***16,000***	***40***	***0.67-240***

*sample results in red bold type exceed MTCA Method A or B cleanup standards; -- = analyte not tested; shaded boxes indicate sample exceeds MTCA Method A screening level

March 12, 2015
Cascade Laundry, 205 Prospect Street, Bellingham, WA
Environmental Baseline

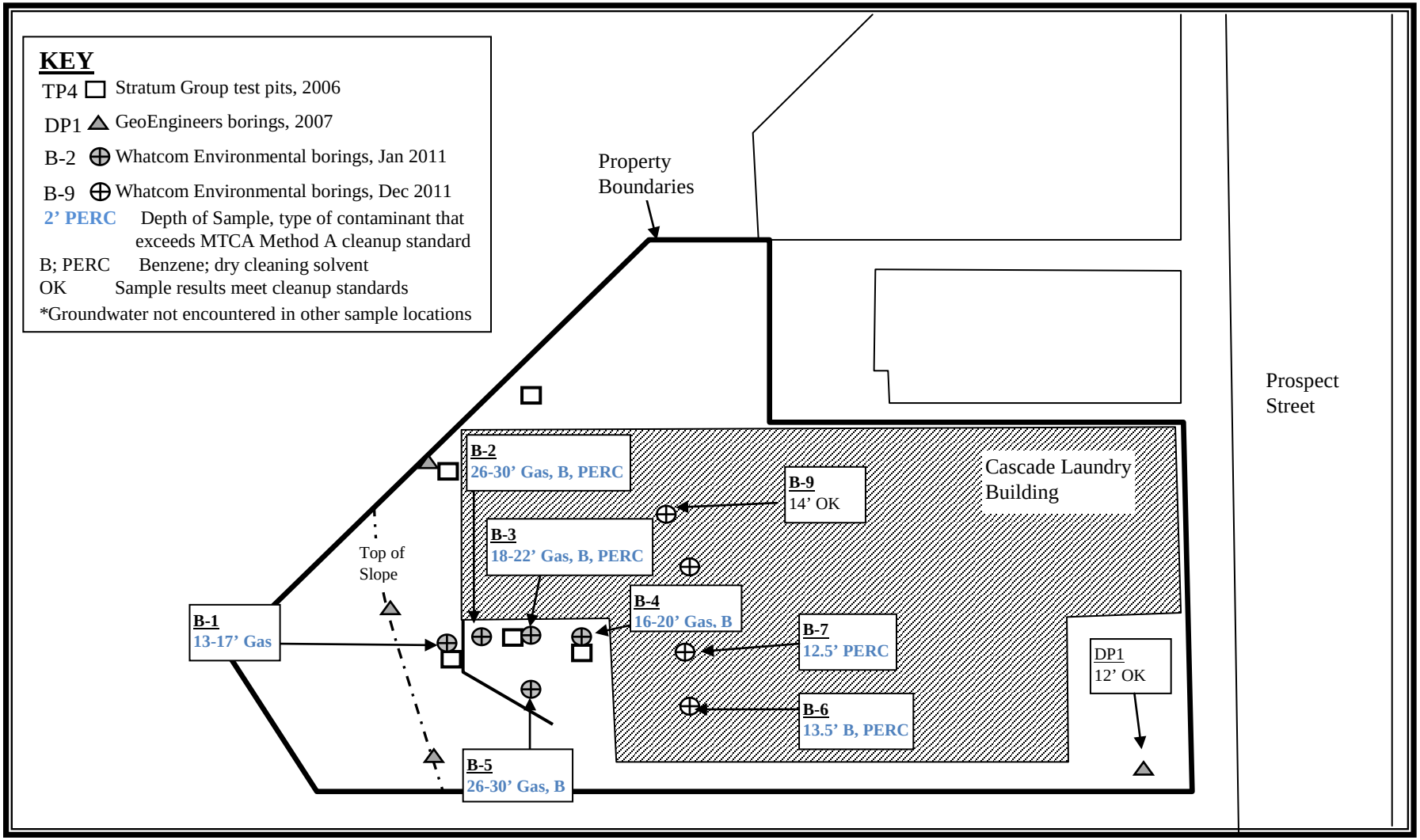


Figure 9. Groundwater Sample Locations with exceedences above MTCA Method A

Table 3. Compilation of Groundwater Sample Data

Sample Location	Sample Depth (feet)	Groundwater Contaminants (µg/L)					
		Gas	**Benzene**	**Toluene**	**Ethyl-benzene**	**Xylenes**	**PERC**
DP1	12	ND	ND	ND	ND	ND	--
B-1	13-17	**4,400**	ND	ND	36	44	ND
B-2	26-30	**13,000**	**21**	ND	66	97	**3,100**
B-3	18-22	**9,700**	**14**	26	180	360	**5.4**
B-4	16-20	**5,700**	**49**	11	55	55	3.9
B-5	26-30	**13,000**	**28**	51	200	340	4.4
B-6	~13.5[1]	320	**22**	3.9	18	8.2	**5.9**
B-7	~12.5[1]	ND	ND	2.3	ND	ND	**13**
B-9	~14[1]	ND	ND	1.0	ND	ND	ND
***MTCA Method A* (µg/L)**		***800/1,000***	***5***	***1,000***	***700***	***1,000***	***5***

1 = depth of the first water encountered. Depth of sample is unknown; *sample results in blue bold type exceed MTCA Method A or B cleanup standards; -- = analyte not tested; ND = analyte not detected; diesel, oil and vinyl chloride not analyzed; shaded boxes indicate sample exceeds MTCA Method A screening level

6.0 GROUND PENETRATING RADAR SURVEY

A ground penetrating radar (GPR) was completed throughout the interior and exterior of the Cascade Laundry site on February 9, 2015. The purpose of the survey was to determine the locations of any underground storage tanks. The GPR investigation did not detect any anomalies other than the presence of utility lines at the site.

The GPR study was completed by Applied Professional Services using a Dual Frequency Antennae (300 MHz/800 MHz) that is manufactured by Geophysical Survey Systems. GPR provides non-destructive, detailed cross-sectional imagery of the subsurface and can be used to detect utility lines, tanks, changes in subsurface materials, or buried objects. The GPR unit consists of a sending antenna which sends out pulses of radio waves (electromagnetic radiation) and a receiving antenna which picks up those pulses as they reflect off of underground objects. The GPR system is mobile and was walked throughout the exterior of the property and interior of the building. The clarity of the GPR study extended from 4 to 6 foot depth.

No underground storage tanks were identified during the study. In fact, the location of the former gasoline UST on the west side of the building was not visible in the survey. Previous documentation indicated that the tank had been closed-in-place, but the lack of imagery of the tank indicates that the tank may have been removed. Some underground utility lines that included natural gas lines, a sewer line, and pipes that held steam for the former dry cleaner were identified.

7.0 INDOOR AIR SAMPLING

7.1 Indoor Air Quality Sampling

The purpose of the indoor air sampling event was to evaluate the concentration of volatile organic compounds within the building and determine if the indoor air quality has been impacted by vapor intrusion. Vapor intrusion is the migration of contaminated air from the subsurface soil and/or groundwater into a building. The sampling event was also utilized to determine the general indoor air quality for potential risk to future employees or building occupants.

The building at 205 Prospect Street was primarily utilized as a dry cleaner and commercial laundry washing facility. Additional use of the building included dying clothes and leather tanning. Based upon these uses, as well as documented contamination of volatile organic compounds in the soil and groundwater, samples were collected and analyzed for volatile organic compounds.

Sampling was conducted over a 24-hour period on October 21, 2014 by Kim Ninnemann of Stratum Group.

7.1.1 Air Quality Sampling Methods

Air quality samples were collected from the main and upper floor of the building at 205 Prospect Street. Sampling equipment was used to collect a 24-hour sample of air from within the building.

Volatile organic compounds were collected using EPA Method TO-15. The samples were collected in a 6 liter summo canister. The summo canisters were pre-cleaned, leak checked, and certified and supplied by the laboratory. Canisters were placed on the floor within rooms where sampling data was desired and where volatile organic compounds were most likely to be present. A flow controller was utilized to collect a 24-hour time integrated sample from each sample location. The brass cap was removed and the flow controller attached to the top of the canister. The canister valve was opened to allow the ambient air to be drawn into the vacuum within the canister. Records were kept regarding start and end times for sampling and the pressure of the canister before and after sampling. An ambient air sample was not collected as part of this sampling event.

7.1.2 Indoor Air Quality Sample Locations

A total of six Summa canisters were placed throughout the interior of the Cascade Laundry building in order to collect air quality data. Two sample locations were tested from the second floor of the building and four sample locations were chosen on the main floor, which is the lowest occupied level of the building. A basement is located within the building, but is only utilized for maintenance equipment and boilers. These areas were chosen based upon previous chemical usage, rooms above sample locations where soil and/or groundwater contamination is present, and/or general air quality within the usable portions of the building. A map of the indoor sample locations is provided in Figure

10 below.

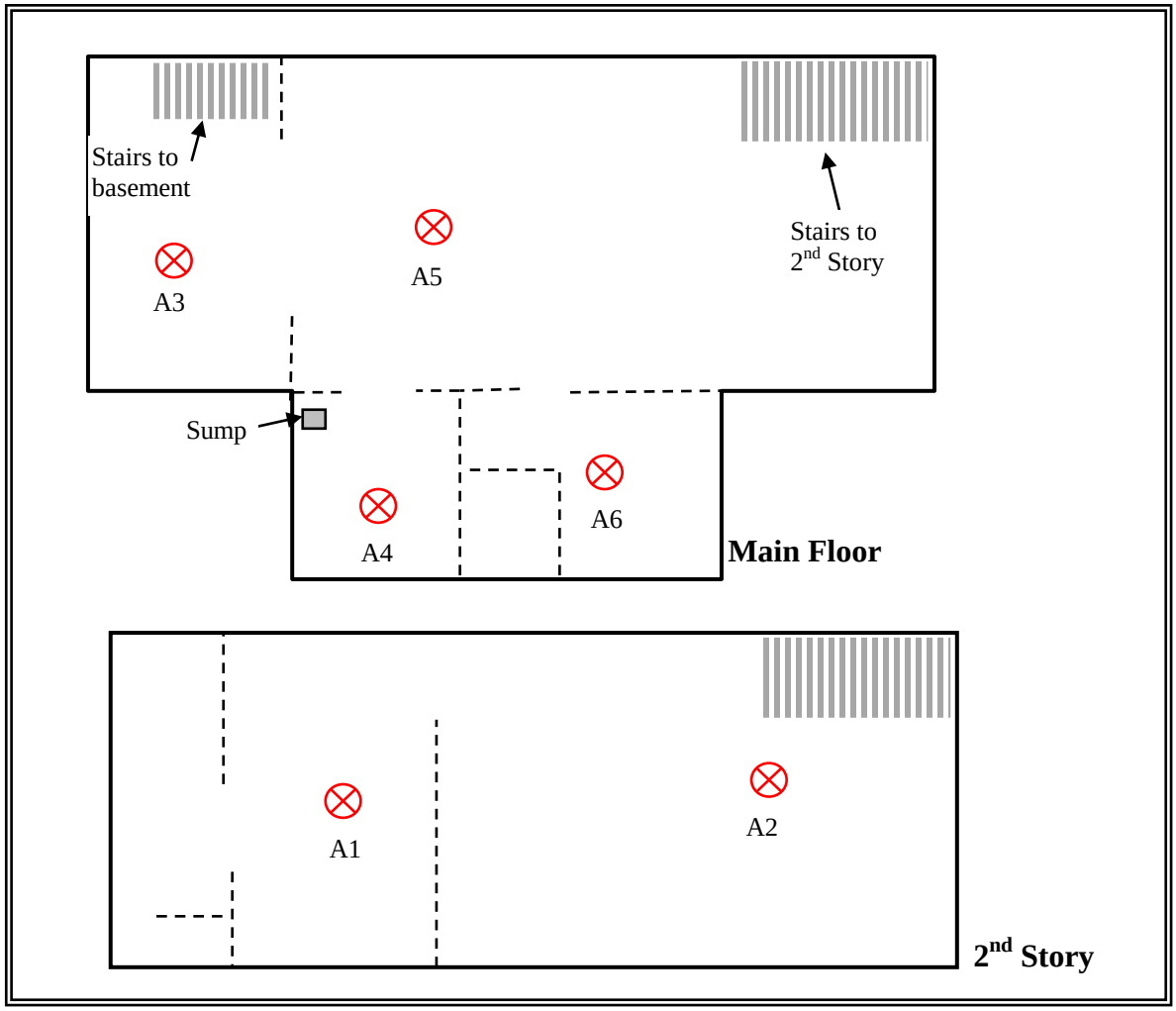


Figure 10. Indoor Air Sample Locations
(drawing scale is approximate)

At the time of the sampling event, the building was vacant and all laundering and dry cleaning equipment had been removed. No chemical storage was observed within the building. Minor furniture and/or shelving is present. The locations of the samples are provided in Figure 8.

Sample A1 was collected from the former leather tanning room in the west end of the second story of the building. The sample was collected to evaluate potential air quality issues associated with the former usage of the room.

Sample A2 was collected from the main open area of the second story. No chemical usage is known

to have taken place in this portion of the building. Sample was collected to evaluate the general air quality of the space.

Samples A3 through A6 were collected from the main floor of the building.

Sample A3 was collected from the former equipment room in the west end of the building.

Sample A4 was collected from the southwest room of building. The use of the room is unknown; however the room contains a sump (4' wide by 4'long by 5' deep) that was used for collection of discharge from the onsite laundry and potentially dry cleaning equipment. The sump does not have a formal lid and contains a few feet of solids and liquids.

Sample A5 was collected from the main dry cleaning and laundering area, in the west end of the main portion of the building.

Sample A6 was collected from the southern room of building (1962 addition). No chemical usage is known to have taken place in this area; however environmental sampling through the floor of the room identified the presence of soil and groundwater contamination at depths below 14 feet.

7.1.3 Indoor Air Sampling Cleanup Standards

The air quality within the building was compared to two separate standards. The sample results were compared to both the air cleanup levels presented in the *Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* (Department of Ecology, review draft Oct 2009) and the L& I permissible exposure limits for worker safety.

Vapor Intrusion Pathway Cleanup Standards

The air cleanup screening levels (Table B-1 of Guidance for Evaluating Soil Vapor Intrusion) are general screening levels that were calculated using Method B risk factors and are used to evaluate indoor air quality. The screening levels were based upon the assumption that the air is inhaled 24 hours per day. Based upon a 24-hour exposure risk level, the concentrations are generally more protective and lower than the Labor and Industries permissible exposure limits for an 8 hour work day. For this site, a full 24 hour sample was collected from each sample location. The Table B-1 screening concentrations are used to determine if a vapor intrusion pathway be present and require further assessment.

The cleanup standard for each individual contaminant identified during our sampling is provided in Table 4, below. Please note that air quality results and cleanup standards are reported in micrograms per cubic meter of air ($\mu g/m^3$) in Table 2, which is the unit used for comparison of results to the MTCA Method B cleanup standard. A total of 76 compounds were analyzed as part of the volatile organic compound analyses; however only the compounds detected are listed in the table below.

Table 4. Indoor Air Quality Screening Levels

Analytes^	Risk Driver	Screening Levels* ($\mu g/m^3$)	
		Non-cancer	Cancer
Propene	--	--	--
Dichlorodifluoromethane (CFC 12)	NC	80	--
Chloromethane	C	--	1.4
Trichlorofluoromethane	NC	--	320
Trichlorotrifluoroethane	--	--	--
Benzene	C	14	0.32
Carbon Tetrachloride	C	--	0.17
Trichloroethene (trichloroethylene – TCE)	C	16	0.1
2-Propanol (Isopropyl alcohol)	--	--	--
Cis-1,2-Dichloroethene (cis1,2dichloroethylene)	--	--	--
Chloroform	C	--	0.11
Ethyl Acetate	--	--	--
Toluene	ND	2,200	--
Tetrachloroethene (tetrachloroethylene – PERC/PCE)	C	16	0.42
Chlorobenzene	NC	8	--

^ = only analytes detected in the laboratory through the volatile organic compound analysis are listed; *screening levels taken from indoor air cleanup levels in Table B-1 of *Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* (Ecology, 2009); Risk Driver = cancer (C) or non-cancer (NC)

Worker Safety Cleanup Standards

The source of the indoor air contaminants has not been determined; however, the most likely future use of the building will be for office, workshop, and/or commercial activity. Based upon these future site uses, the indoor air quality would need to meet Washington State L & I permissible exposure limits to protect worker safety throughout an 8 hour work day.

To evaluate the indoor sampling data to the state permissible exposure limits, the maximum concentration of each of the primary contaminants was calculated to represent an 8 hour exposure (ie concentration x hours/8 hours). The calculated data was compared to the Washington State L & I permissible exposure limits for an 8 hour workday. The permissible exposure limits are presented in units of parts per billion per volume (ppmV).

To evaluate the risk associated with multiple contaminants, contaminants are typically evaluated to determine if their health effects are additive. For evaluation of air quality at this site, all contaminants presented were assumed to be additive. The risk posed by the contaminants was evaluated using the following formula:

$$C_1/L_1 + C_2/L_2 + C_n/L_n = E_m$$

Where C_1 = 8-hr time weighted concentration for the first contaminant
C_2 =8-hr time weighted concentration for the second contaminant
L_1 = TWA_8 for the first contaminant
L_2 = TWA_8 for the first contaminant
E_m = equivalent exposure for the mixture of contaminants with additive health effects.

A health effect is present if E_m is greater than 1.

Table 5 contains state permissible exposure limits of the four primary contaminants.

Table 5. L&I Permissible Exposure Limits

Analytes	***WA L&I Permissible Exposure Limits – TWA_8^*** (ppbV)
Benzene	1,000
Carbon Tetrachloride	2,000
Trichloroethene (TCE)	50,000
Chloroform	2,000
Equivalent Exposure Assessment (E_m) for VOCs^	$E_M \leq 1$

7.1.4 Indoor Air Quality Sample Results

Samples were delivered via Fed Ex to ALS Laboratory Group in Simi Valley, California for analysis on October 24, 2014. A complete analytical laboratory report and chain-of-custody are presented in Appendix II. Samples from each location within the building were analyzed for volatile organic compounds using EPA Method TO-15. A total of 76 compounds were analyzed as part of the volatile organic compound analyses; however only the compounds detected are listed in the table below.

The laboratory report provides contaminant detections in µg/m^3 and ppbV. The µg/m^3 unit is typically used for comparison with MTCA air quality cleanup standards and the ppbV unit is used for comparison with the workplace safety permissible exposure limits. A summary of the sample results are presented in Table 6. The sample results are compared to the air cleanup screening levels for evaluation of vapor intrusion pathway.

Table 6. Indoor Air Quality Sampling Results compared to Vapor Intrusion Screening Levels

Analytes	**Sample Results** (ug/m^3)						***Air Cleanup Screening Levels*** *(ug/m^3)*	
	A1	**A2**	**A3**	**A4**	**A5**	**A6**	***Non-cancer***	***Cancer***
Propene	ND	ND	3.2	ND	ND	0.81	--	--
Dichlorodifluoromethane (CFC 12)	2.4	2.4	2.5	2.4	2.4	2.4	***80***	--
Chloromethane	ND	ND	ND	0.36	ND	ND	--	***1.4***
Trichlorofluoromethane	1.4	1.4	1.4	1.4	1.4	1.5	--	***320***
Trichlorotrifluoroethane	0.53	0.52	0.57	0.51	0.58	0.58	--	--
Benzene	**0.38**	0.30	**2.6**	0.32	**0.33**	**0.57**	***14***	***0.32***
Carbon Tetrachloride	**0.57**	**0.58**	**0.65**	**0.54**	**0.59**	**0.59**	--	***0.17***
Trichloroethene (TCE)	ND	0.22	**0.66**	**0.40**	**0.72**	**0.39**	***16***	***0.1***
2-Propanol (Isopropyl alcohol)	ND	ND	6.1	ND	ND	ND	--	--
Cis-1,2-Dichloroethene	ND	ND	0.39	0.23	0.41	ND	--	--
Chloroform	ND	ND	**0.24**	**0.13**	**0.12**	ND	--	***0.11***
Ethyl Acetate	ND	1.6	1.8	4.3	2.1	2.1	--	--
Toluene	0.68	0.78	0.74	0.85	1.1	0.79	***2,200***	--
Tetrachloroethene (PERC/PCE)	**0.83**	**2.3**	**6.4**	**4.1**	**6.9**	**2.8**	***16***	***0.42***
Chlorobenzene	ND	ND	0.22	ND	ND	ND	***8***	--

Four of the contaminants were identified at concentrations that exceed the screening levels for vapor intrusion. To evaluate the potential risk of these contaminants for human health, based upon an 8-hour work day, the highest detected concentrations from the October 21, 2014 sampling event were compared against the L&I permissible exposure limits (see Table 7).

Table 7. Indoor Air Quality Results compared with L&I Permissible Exposure Limits

Analytes	**Sample with Highest Concentration**	**Maximum Detection*** (ppbV)	**Calculated TWA_8 Of Maximum Detection (ppbV)#**	***WA L&I Permissible Exposure Limits – TWA_8^*** (ppbV)
Benzene	A3	0.82	2.46	1,000
Carbon Tetrachloride	A3	0.10	0.3	2,000
Trichloroethene (TCE)	A5	0.12	0.36	50,000
Chloroform	A3	0.049	0.147	2,000
Equivalent Exposure Assessment (E_m) for VOCs^			0.0026	$E_M \leq 1$

*concentration of maximum detection from Samples A1-A6, collected on Oct 21, 2014, based upon 24 hour sample collection period; # = time weighted average calculated from the 24 hour sample date; ^ = time weighted average over an 8 hour period based upon *Table 3 Permissible Exposure Limits (PELs) for Airborne Contaminants* (Chapter 296-841, 4/2007)

7.1.5 Indoor Air Results Discussion

Six indoor air quality samples were collected within the building at 205 Prospect Street. Of the 76 volatile organic compounds analyzed, a total of 15 analytes were detected in one or more samples. The concentrations of VOCs were initially compared to the air quality screening levels, based upon MTCA B risk assessments. Of the 15 compounds detected, five of the analytes were detected above the cleanup standard for acceptable indoor air quality for carcinogenic compounds: benzene, carbon tetrachloride, TCE, PERC, and chloroform. All of the concentrations are less than 10 times the cleanup standard and most exceedences are less than 2 times the cleanup standard. No immediate action is warranted; however the exceedences of the screening levels indicates that further evaluation of the vapor intrusion pathway should be conducted.

Based upon the results, five VOCs were identified as potential contaminants of concern for indoor air quality. However, multiple lines of evidence should be assessed before any action is taken to protect indoor receptors. The data collected is representative of indoor air quality, but does not separate the sources of the contamination such as: outdoor air contamination that has entered the building, an indoor contamination source, and/or contaminated air that has migrated from the contaminated soil via vapor intrusion. Therefore, the source of the indoor air contaminants is inconclusive.

In comparison to the L & I Permissible Exposure Limits, the air quality within the Cascade Laundry building is well below the action levels for occupants onsite for an 8 hour workday. The air quality does not pose a risk to occupants or workers within the building over an 8 hour period.

8.0 INDOOR SUMP SAMPLING

A sump was identified within the southwestern corner of the building. The sump is a constructed low area within the floor of the building that is approximately 4 feet wide by 4 feet long by approximately 5 feet deep. The sump receives discharge from a pipe along its northern interior wall. The pipe looks to have formerly collected runoff from equipment that was located in the main room, to the north. A pipe exits the sump, toward the south. The pipe likely discharges into the soil along the southwestern corner of the building, but the exact discharge area was not identified during this sampling event.

At the time of the sampling on October 21, 2014, the sump was filled with approximately 2 feet of soil-like material and approximately 1 foot of liquid. One soil sample and one liquid sample were collected from the sump. The soil sample was analyzed for diesel and oil-range petroleum and volatile organic compounds. The liquid sample was analyzed for volatile organic compounds. The samples were placed in an ice filled cooler and transported to ALS Laboratory in Everett, Washington by Red Dog Courier on October 22, 2014 for analysis.

The results of the samples are provided below in Tables 8 and 9. The table includes MTCA Method A and B cleanup standards for both soil and groundwater. A copy of the laboratory report and chain-of-custody for the samples is provided in Appendix II.

Table 8. Sump Soil Sample Results

Sample ID	**Analytes Detected (mg/kg)**				
	Diesel	**Oil**	**1,3,5Trimethyl-benzene**	**1,2,4Trimethyl-benzene**	**Other VOCs***
Sump – sediment	**1,600**	**5,200**	0.011	0.036	ND
MTCA Cleanup Standards	***2,000*** $_A$		***800*** $_B$	**--**	***varies***

*A total of 66 volatile organic compounds were tested; ND = analyte not detected; A = cleanup standard based upon MTCA Method A; B = cleanup standard is based upon MTCA Method B.

Table 9. Sump Water Sample Results

Sample ID	**Analytes Detected (mg/kg)**
	VOCs*
Sump – water	ND
MTCA Cleanup Standards	***varies***

*A total of 66 volatile organic compounds were tested; ND = analyte not detected

8.1 Indoor Sump Sampling Results Discussion

Based upon the results of the sump sampling event, the soil within the sump has been contaminated with diesel and oil-range petroleum hydrocarbons. The water is suspected to have been contaminated with diesel and oil range petroleum products. The sump sediment and liquid has not been impacted by dry cleaning solvents.

The results indicate that discharge from the site's equipment (vapor moisture, water, and/or hydraulic oils) were released into the sump and likely were discharged out of the building.

We recommend that the sump be pumped clean and the materials be removed and disposed of properly, as heavy petroleum contaminated material.

9.0 NATURE AND EXTENT OF CONTAMINATION

9.1 Circumstance of Release and Discovery

Contaminated soil was identified on the site during a test pit investigation in 2006, as part of environmental due diligence for a potential site purchaser. The Department of Ecology was notified of the presence of contamination based upon the discovery of contaminated soil in the southwest corner of the building at the time of a tank removal in 2010. The site was placed on Ecology's Confirmed and Suspected Contaminated Sites list on November 10, 2010.

9.2 Affected Media

Soil and groundwater contamination have been confirmed on the site.

9.3 Contaminant Identification

A summary of the contaminants of concern at the site are provided in Table 10, below. Contaminants were identified through multiple soil and groundwater sampling events, based upon the historic uses of the property. The MTCA Method A cleanup standards were typically used as screening levels for soil and groundwater contaminant levels. The MTCA Method B standards for indoor air quality were used as a screening tool for identifying potential contaminants of concern in the indoor air quality. Cleanup action is not necessarily required for each of the contaminants listed in Table 10; however these contaminants are recommended for evaluation during future sampling events.

Table 10. Site Specific Contaminants of Concern

Soil Contaminants	Groundwater Contaminants	Indoor Air Quality Contaminants
• Gasoline-range petroleum (mineral spirits) • Benzene • Ethylbenzene • Xylenes • Diesel and oil-range petroleum • Tetrachloroethylene (PERC) • Vinyl chloride	• Gasoline-range petroleum • Benzene • Tetrachloroethlyene (PERC)	• Benzene • Carbon Tetrachloride • Trichloroethene (TCE) • Chloroform • Tetrachloroethylene (PERC/PCE)

The gasoline-range hydrocarbons identified on the site are identified by the laboratory as mineral spirits in many of the lab notes. The presence of gasoline in the subsurface may therefore be associated with mineral spirits used as a cleaning agent (Stoddard solvent), rather than gasoline fuel.

9.4 Extent and Magnitude of Contamination

9.4.1 Extent of Soil Contamination

Soil contamination was in the shallow fill soils along the southwestern corner of the building. In addition, soil contamination has been identified in the soils between 14 and 24 feet depth throughout the southern and western portions of the site, including beneath the western end of the 1962 building addition, which is located along the southern side of the main building. Two soil samples collected from approximately 30 feet depth were found to be free of contaminants and indicate that the soil contamination does not extend below 30 feet depth.

9.4.2 Extent of Groundwater Contamination

Groundwater beneath the site was identified between 12 and 17 feet during sampling events completed in winter and spring months. No groundwater was detected in the same areas during a summer investigation. Based upon our review of previous environmental reports, perched groundwater is detected in the winter and spring months between 12 and 17 feet. The groundwater below 17 feet depth is presented within slightly coarser sand layers within dominantly saturated silty clay (Whatcom Environmental, 2011).

Groundwater contamination has been identified beneath the south, southwest, and western portions of the site, including beneath the southern, 1962 addition portion of the building. No groundwater contamination was identified beneath the western, main portion of the building. No groundwater contamination was identified in the southeastern portion of the site, based upon one groundwater sample from 2007.

9.5 Sources of Contamination

9.5.1 Onsite Sources of Contamination

Multiple sources of contamination are suspected on the Cascade Laundry site, due to long term use as a dry cleaner and laundry facility. The contamination on the site is suspected to be due to one or more of the following:

- Release from former USTs
- Release to surface soils through former operations (ie. dumping materials out the back door)
- Release from sump discharge drain
- Placement of fill materials and/or dumping at top of slope, near western property boundary

9.5.2 Potential Offsite Sources of Contamination

The Cascade Laundry site is bound by a landfill to the west. Based upon the landfill being located in a down gradient position, relative to the subject property, contamination is not suspected from the landfill activities.

Historic review of the site indicates that gasoline tank was located beneath Prospect Street throughout the 1900s, as indicated by the 1932 and 1963 Sanborn Fire Insurance Maps. In addition, a gasoline station was constructed on the corner of Prospect and Flora Street (200 Prospect Street), across Prospect Street from the subject property by 1932. The gasoline station operated until the late 1970s. No information was available regarding removal of tanks or cleanup of this former gasoline station. A warehouse building, constructed by 1913, has occupied the property across Prospect Street at 206 Prospect Street. The building has been utilized as a garage, warehouse, auto repair facility, and a museum. All of these adjacent property uses are located up gradient of the subject property.

Limited environmental data indicates that these are not sources of contamination on the subject property, as a soil and groundwater sample collected from the southeastern portion of the site in 2007 showed no indication of gasoline contamination and no gasoline contamination was identified in the groundwater beneath the main, western portion of the building during a 2011 investigation. Additional sampling could be conducted to further investigate these off-site sources, but based upon our evaluation they are not considered a likely source of the contamination on the Cascade Laundry site.

10.0 DEVELOPMENT OF CLEANUP STANDARDS

In order to meet the intent of the Model Toxic Control Act cleanup regulations, cleanup standards must be set to be protective of human health and the environment, including ecological health.

10.1 Terrestrial Ecological Evaluation

A Terrestrial Ecological Evaluation (TEE) is required if hazardous substances are released to the soil at a site. The TEE is conducted to determine if cleanup standards for the site are required to be protective of soil biota, plants and/or wildlife.

Based on the TEE process, the site is not exempt from the ecological cleanup standards and must utilize a simplified terrestrial ecological evaluation or a site specific evaluation for cleanup standards that are protective of wildlife. The site is utilized as a commercial property and therefore will not need to be protective of soil biota or plant species; however cleanup standards that are protective of wildlife will need to be developed.

Discussions with Department of Ecology personnel should be conducted to evaluate whether a simplified or site specific TEE is required for the site.

10.2 Cleanup Standards

Department of Ecology offers three options for cleanup standards: Method A, Method B, and Method C.

Method A is used on sites where the cleanup action is limited and common contaminants are present. Method A utilizes a common list of approximately 20 chemicals that have standardized cleanup levels and must take into account cleanup levels that are protective of ecological health. When the standards are met, the site can be used with unrestricted land use.

Method B cleanup standards can be used at any site. The cleanup standards are developed using standard default assumptions in risk equations; however the default assumptions can be modified, if appropriate. Cleanup levels for Method B are set at a risk level where risk does not exceed 1 in 100,000. Cleanup levels must also be protective of terrestrial and aquatic ecological environments. Most sites that meet Method B cleanup standards can be used with unrestricted land use.

Method C cleanup standards are utilized on industrial sites and typically require an institutional control to maintain protection for human and ecological health.

10.2.1 Soil Cleanup Standards

Cleanup standards will need to be developed for soil concentrations on the site. Soil cleanup standards are set to be protective of direct interaction with the soil from humans as well as protection of surface water quality and groundwater quality.

We recommend that the site utilize the Method B cleanup standards on the Cascade Laundry site;

however soil cleanup standards for Method A, Method B and wildlife protection are provided for your information. The final cleanup standards concentrations must also be protective of wildlife. To provide a point of comparison, the highest concentration of the contaminant detected in the soil, throughout all the onsite sampling events, is provided in the table below.

Table 11. Soil Cleanup Standards

Contaminant	MTCA Method A Cleanup Standard (mg/kg)	MTCA Method B Cleanup Standard (mg/kg)	Cleanup Standards for Protection of Wildlife[1] (mg/kg)	Highest Concentration Detected Onsite (mg/kg)
Gasoline	30/100[2]	*requires lab testing of samples for petroleum fractions (VPH/EPH)	12,000/5,000[3]	1,600
Diesel	2,000		15,000/6,000[3]	2,600
Oil				3,300
Benzene	0.03	320	Not available	7.2
Ethylbenzene	6	800	Not available	4.0
Xylenes	9	16,000	Not available	16
Tetracholorethene (trichloroethylene/PERC)	0.03	40	Not available	45
Vinyl Chloride	--	0.67 – 240[4]	Not available	1.3

1 = the wildlife protection levels are based upon Table 749-2 for sites that qualify for the simplified TEE and Table 749-3 for sites that conduct a site specific TEE. Site specific values can also be determined; 2 = cleanup standard for gasoline is 30 if benzene is present and 100 if benzene is not present; 3 = sample cannot have concentration at the surface soil that exceeds residual saturation concentrations; 4 = Ecology provides specific guidance regarding vinyl chloride, due to higher cancer risks from exposure in early life versus adulthood and cancer versus non-cancer cleanup standards

10.2.2 Groundwater Cleanup Standards

Groundwater cleanup standards are developed to be protective of groundwater for drinking water purposes. No groundwater monitoring wells are located on the site. Previous environmental sampling events have included collection of groundwater samples. The sample results have been compared to MTCA Method A cleanup standards, of which gasoline and benzene have exceeded the standards.

Cleanup Standards for Potable Water

Groundwater is assumed to be potable with potential down gradient use at all sites. The protection of drinking water sources is a primary goal of cleanup standards and often drives the cleanup standard developed for soil quality. The MTCA Method A and Method B cleanup standards for the groundwater contaminants of concern at the site are presented in Table 12, below. For comparison, the highest concentration of the contaminants identified in the groundwater of the Cascade Laundry site, to-date is provided. Please note that groundwater samples and cleanup standards are provided in parts per billion (µg/L)

Table 12. Potable Groundwater Cleanup Standards

Contaminant	MTCA Method A Cleanup Standard (µg/L)	MTCA Method B Cleanup Standard (µg/L)	Highest Concentration Detected Onsite (µg/L)[1]
Gasoline	800/1,000[2]	--	13,000
Benzene	5	5[3]	49
Tetracholorethlyene (PERC/PCE)	5	5[3]	3,100

1 = groundwater results were collected in three sampling investigations between 2007-2012 (see Section 5.2 Soil and Groundwater Sampling History); 2 = gasoline cleanup standard is lower if benzene is present; 3 = cleanup standards can vary based upon cancer risk - may require further evaluation

Cleanup Standards for Non-Potable Water

The groundwater does not require to be cleaned up to meet drinking water standards, if Ecology is provided proof that the groundwater is non-potable. Water is considered non-potable if the groundwater is not used for drinking water purposes, will not ever be used for drinking water purposes and no potential down gradient properties will utilize the groundwater for drinking water purposes.

MTCA regulations require that the following information be documented in order to eliminate groundwater as a requirement for cleanup (WAC 173-340-720 (2)):

- Groundwater does not currently serve as a drinking water source
- Groundwater is not a potential future source of drinking water (must meet one of the following reasons)
  - Low yield (≤ 0.5 gal/min)
  - Natural background levels of organic or inorganic constituents are high (ie total dissolved solids at ≥10,000 mg/L)
  - Recovery of groundwater for drinking purposes is technically impossible (depth or location)
- Department of Ecology determines it is unlikely for contaminated water to travel to groundwater that may be used as drinking water

No groundwater monitoring wells are currently located on the site; however based upon our review of previous sampling events, it is likely that the groundwater at the site will be considered to be non-potable based upon the site not being used as a drinking water source, no down gradient receptors based upon the down gradient site being a landfill, and the likely low yield of any onsite wells.

If groundwater is determined to be nonpotable, the groundwater does not need to be remediated; however, the concentrations of contaminants in the groundwater cannot impact air quality through vapor intrusion or have other pathways of impacts to human health or ecological health.

11.0 FINDINGS AND RECOMMENDATIONS

Our review of the environmental reports for the Cascade Laundry facility confirms the presence of petroleum and dry cleaning solvent contamination in the soil and groundwater beneath the site, including beneath the southern portion of the building that exceeds the MTCA Method A cleanup standards. In addition, petroleum contaminated sediment and water was identified in the sump within the building. Detections of some volatile organic compounds were identified within the indoor air of the building. Our evaluation of the data indicates that the air quality within the building is protective of workers during an 8 hour work shift, per Washington State Labor and Industries permissible exposure limits; however the data is inconclusive as to whether the detections of the volatile organic compounds are due to vapor intrusion from the underlying impacted soil and groundwater, indoor sources or from ambient outdoor air.

Our site review identified numerous areas where additional information is needed to help determine the most appropriate cleanup options for the site. The studies can be completed independently of Department of Ecology; however, if efforts are going to be made to have the site removed from the contaminated sites list, we recommend that the site enter the Voluntary Cleanup Program (VCP). The VCP is a program where Ecology provides fee-based technical advice before, during, or after site cleanups. Ecology reviews cleanup reports and determines whether they meet the appropriate cleanup standards. Ecology is not directly involved in the cleanup activities, but if the site meets the cleanup standards or has a low risk, Ecology personnel can provide a "no further action" letter or restrictive covenant and the site is removed from the contaminated sites list. Through the VCP, work plans can be reviewed and evaluated by Ecology personnel so that property owner and Ecology are in agreement about how to move forward on cleanup sites.

We recommend that the following studies take place to gather additional information about the site:

- Determine if groundwater is considered nonpotable
- Determine if vapor intrusion is present
- Determine appropriate cleanup standards for site

Determine if groundwater is considered nonpotable

We recommend that a minimum of four groundwater monitoring wells be placed around the Cascade Laundry facility. The monitoring wells can be used to evaluate the depth to groundwater, the variability in water quality within the wells, and can be used to evaluate for flow volumes for determining potential potability. If groundwater is deemed nonpotable, cleanup standards do not need to be protective of a drinking water source and are therefore typically less stringent.

Determine if vapor intrusion is present

Vapor intrusion is the migration of vapors from the subsurface into the building airspace. A single air

quality sampling event in October 2014 identified levels of five volatile organic compounds above the MTCA Method B screening levels; however the source of the contaminants was not determined. Further evaluation of the site's vapor intrusion risk should be completed. We recommend that further evaluation of the indoor air quality be conducted. The investigation can include evaluation of the potential vapor migration from ground water using the Johnson and Ettinger model for subsurface vapor intrusion into buildings. If needed, additional sampling can also be completed that could include a second round of indoor air quality sampling, an ambient air sample, and sub-slab or soil gas sampling.

Determine appropriate cleanup standards for site

Cleanup standards should be determined for all the applicable impacted media on the site (groundwater, soil, and/or indoor air quality). Cleanup standards must be protective of both human health and wildlife. We recommend that Method B cleanup standards be identified for human health cleanup standards. To determine Method B cleanup standards for petroleum products, soil samples should be collected and evaluated using Method VPH/EPH so that the carbon fractionation of the contaminants can be determined. These values are used within the Method B risk assessment models for determining a site specific cleanup value.

In addition, cleanup values need to be determined that are protective of wildlife. The concentrations of contaminants for protection of wildlife are determined through the Terrestrial Ecological Evaluation (TEE) process. The Cascade Laundry site must do a simplified or site specific TEE. We recommend that the Ecology site manager be involved with the TEE process to help in determining what type of TEE is most appropriate for the site.

APPENDIX I

Historic Aerial Photographs

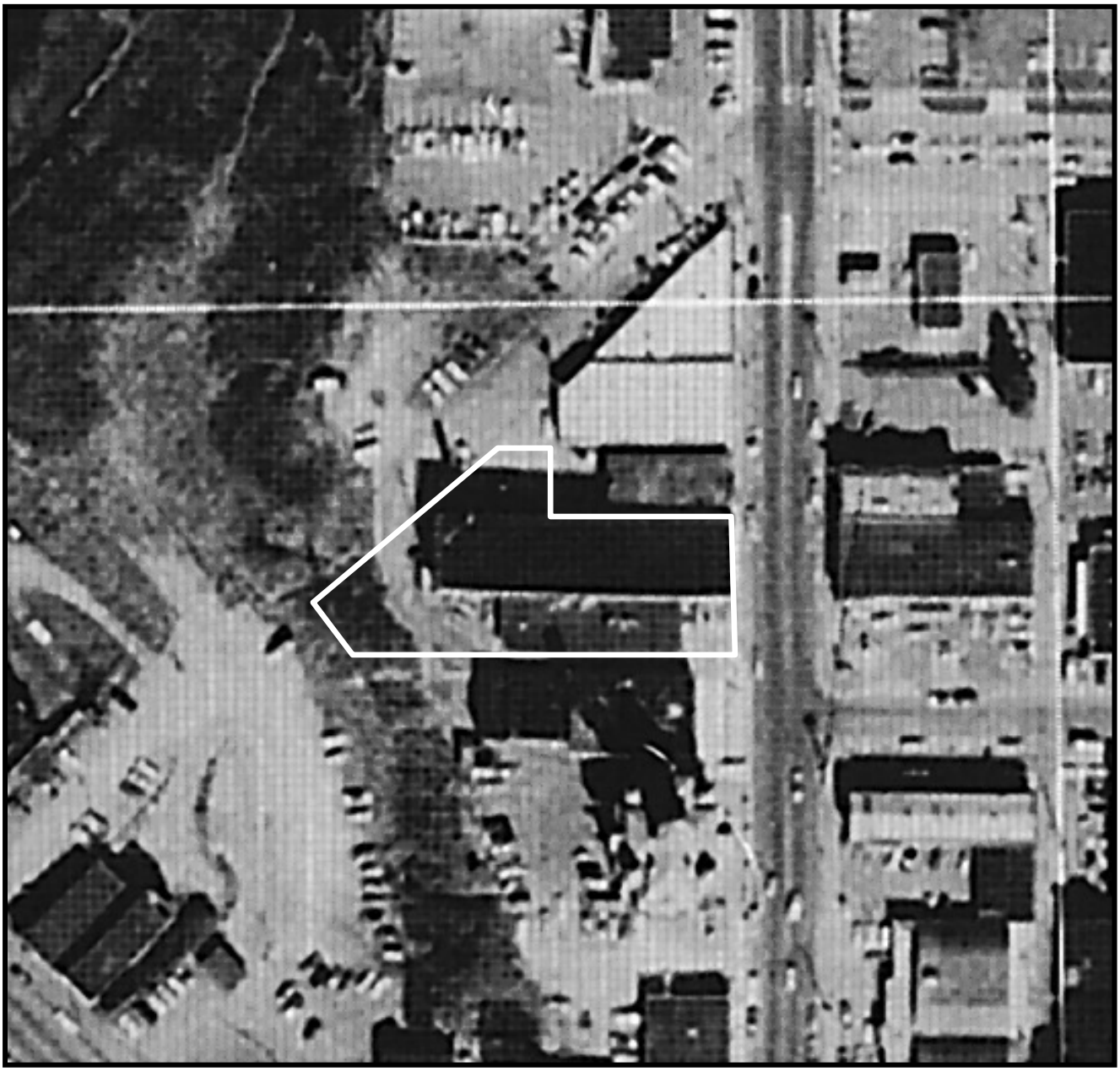
Sanborn Fire Insurance Maps

Historic Site Photographs

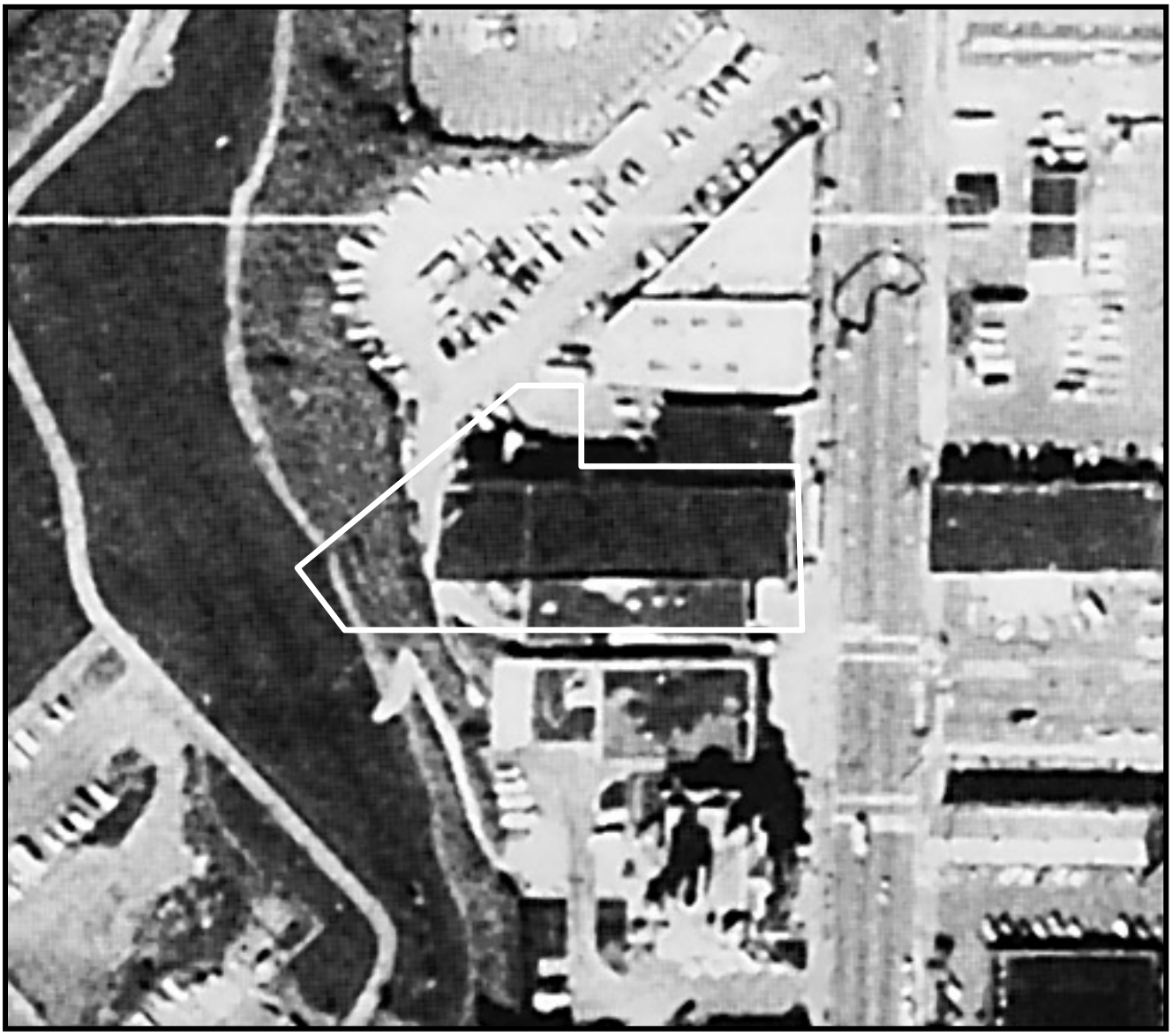
Historic Aerial Photographs

1950 Historic Aerial Photograph

1963 Historic Aerial Photograph



1975 Historic Aerial Photograph

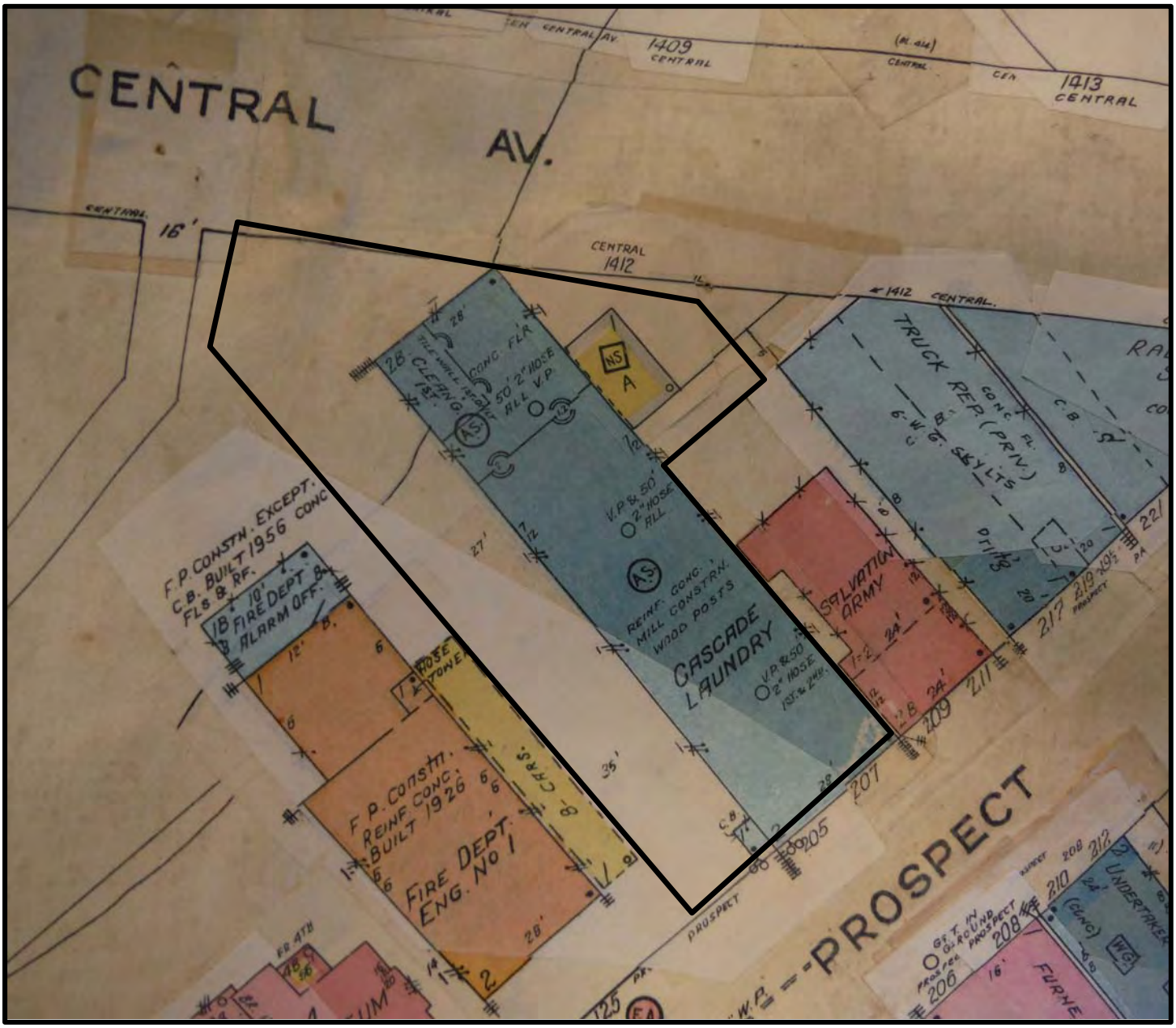


1988 Historic Aerial Photograph

1997 Historic Aerial Photograph

2008 Historic Aerial Photograph

Sanborn Fire Insurance Map



Sanborn Fire Insurance Map 1917-1932

Historic Site Photographs

1924 Photograph of 205-207 Prospect, pre-Cascade Laundry (courtesy of Whatcom Museum of History and Art)

1970 Photograph (courtesy of Whatcom Museum of History and Art)

APPENDIX II

Laboratory Report for Indoor Air Sampling

Laboratory Report for Indoor Sump Testing

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

November 10, 2014

Kim Ninnemann
Stratum Group, Inc.
P.O. Box 2546
Bellingham, WA 98227

RE: Cascade Laundry

Dear Kim:

Enclosed are the results of the samples submitted to our laboratory on October 24, 2014. For your reference, these analyses have been assigned our service request number P1404375.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kate Aguilera

By Kate Aguilera at 2:55 pm, Nov 10, 2014

Kate Aguilera
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Stratum Group, Inc.
Project: Cascade Laundry

Service Request No: P1404375

CASE NARRATIVE

The samples were received intact under chain of custody on October 24, 2014 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation. Any analytes flagged with an X are not included on the laboratory's NELAP or DoD-ELAP scope of accreditation.

The spike recovery of trichlorofluoromethane in the Laboratory Control Sample (LCS) was outside the Laboratory generated control criterion. The recovery error equates to a potential high bias. However, the recovery in question was within the method criterion, therefore the data quality is not significantly affected. No corrective action was taken.

The Summa canisters were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	643428
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Stratum Group, Inc. Service Request: P1404375
Project ID: Cascade Laundry

Date Received: 10/24/2014
Time Received: 09:48

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
A1	P1404375-001	Air	10/21/2014	11:52	AS00215	0.63	3.72	X
A2	P1404375-002	Air	10/21/2014	12:00	AC01873	0.45	3.86	X
A3	P1404375-003	Air	10/21/2014	12:10	AS00786	0.66	3.71	X
A4	P1404375-004	Air	10/21/2014	12:14	AS00341	0.66	3.83	X
A5	P1404375-005	Air	10/21/2014	12:17	AS00338	0.49	3.75	X
A6	P1404375-006	Air	10/21/2014	12:20	AS00747	-3.07	3.52	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No. PA404375

Company Name & Address (Reporting Information)
Stratum Group
Po Box 2546
Bellingham, WA 98227

Project Name: Cascade Laundry
Project Number: Cascade Laundry

Project Manager: Kim Ninnemann

P.O. # / Billing Information: Sonja Max / Sonjamaxe@gmail.com
914 12th St
Bellingham, WA 98225

Phone: 360-714-9409
Fax: 360-715-1740

Email Address for Result Reporting: Stratumgroupe@westoffice.net

Sampler (Print & Sign): Kim Ninnemann

ALS Contact:

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments e.g. Actual Preservative or specific instructions
A1	(1) 10.59	10/20-10/21	Final	AS00215	FCA00539	29	0	6L	TO-15		
A2	(2) 10.54	↓		AC01873	FCA00508	30	0	↓	↓		
A3	(3) 10.58			AS00786	FCA???36	730	1				flow controller barcode damage
A4	(4) 10.85			AS00341	FCA00852	29.5	0				
A5	(5) 10.42			AS00338	FCA00042(?)	29.5	0				flow controller barcode damaged
A6	(6) 3.12	↓		AS00747	FCA00851	28	7.5	↓	↓		

Report Tier Levels - please select
Tier I - Results (Default in not specified) ____ Tier III (Results + QC & Calibration Summaries) ✓
Tier II (Results + QC Summaries ____ Tier IV (Date Validation Package) 10% Surcharge ____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Kim Ninnemann	10/22/14	4pm		10/24/14	0905
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				10/24/14	0948

Cooler / Blank Temperature ____°C

5 of 31

ALS Environmental
Sample Acceptance Check Form

Client: Stratum Group, Inc. Work order: P1404375

Project: Cascade Laundry

Sample(s) received on: 10/24/14 Date opened: 10/24/14 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1404375-001.01	6.0 L Silonite Can					
P1404375-002.01	6.0 L Ambient Can					
P1404375-003.01	6.0 L Silonite Can					
P1404375-004.01	6.0 L Silonite Can					
P1404375-005.01	6.0 L Silonite Can					
P1404375-006.01	6.0 L Silonite Can					

Explain any discrepancies: (include lab sample ID numbers):

Chain of Custody is missing time collected

Time collected is noted on the sample container tag.

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A1** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-001

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00215

Initial Pressure (psig): 0.63 Final Pressure (psig): 3.72

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.60	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.60	**0.49**	0.12	
74-87-3	Chloromethane	ND	0.24	ND	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.60	ND	0.086	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.24	ND	0.11	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.045	
64-17-5	Ethanol	ND	6.0	ND	3.2	
75-05-8	Acetonitrile	ND	0.60	ND	0.36	
107-02-8	Acrolein	ND	2.4	ND	1.0	
67-64-1	Acetone	ND	6.0	ND	2.5	
75-69-4	Trichlorofluoromethane	**1.4**	0.12	**0.25**	0.021	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.0	ND	2.4	
107-13-1	Acrylonitrile	ND	0.60	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.030	
75-09-2	Methylene Chloride	ND	0.60	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.038	
76-13-1	Trichlorotrifluoroethane	**0.53**	0.12	**0.069**	0.016	
75-15-0	Carbon Disulfide	ND	6.0	ND	1.9	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.030	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.033	
108-05-4	Vinyl Acetate	ND	6.0	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	6.0	ND	2.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A1** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-001

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00215

Initial Pressure (psig): 0.63 Final Pressure (psig): 3.72

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.030	
141-78-6	Ethyl Acetate	ND	1.2	ND	0.33	
110-54-3	n-Hexane	ND	0.60	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.60	ND	0.20	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	**0.38**	0.12	**0.12**	0.038	
56-23-5	Carbon Tetrachloride	**0.57**	0.12	**0.090**	0.019	
110-82-7	Cyclohexane	ND	1.2	ND	0.35	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	ND	0.12	ND	0.022	
123-91-1	1,4-Dioxane	ND	0.60	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.29	
142-82-5	n-Heptane	ND	0.60	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.60	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.60	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.60	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	**0.68**	0.60	**0.18**	0.16	
591-78-6	2-Hexanone	ND	0.60	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.60	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A1** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-001

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00215

Initial Pressure (psig): 0.63 Final Pressure (psig): 3.72

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.60	ND	0.13	
127-18-4	Tetrachloroethene	**0.83**	0.12	**0.12**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.60	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.60	ND	0.14	
75-25-2	Bromoform	ND	0.60	ND	0.058	
100-42-5	Styrene	ND	0.60	ND	0.14	
95-47-6	o-Xylene	ND	0.60	ND	0.14	
111-84-2	n-Nonane	ND	0.60	ND	0.11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.017	
98-82-8	Cumene	ND	0.60	ND	0.12	
80-56-8	alpha-Pinene	ND	0.60	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.60	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.60	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.60	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.60	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.60	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.60	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.60	ND	0.062	
120-82-1	1,2,4-Trichlorobenzene	ND	0.60	ND	0.081	
91-20-3	Naphthalene	ND	0.60	ND	0.11	
87-68-3	Hexachlorobutadiene	ND	0.60	ND	0.056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A2** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-002

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01873

Initial Pressure (psig): 0.45 Final Pressure (psig): 3.86

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.62	ND	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.62	**0.49**	0.12	
74-87-3	Chloromethane	ND	0.25	ND	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.62	ND	0.088	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.048	
106-99-0	1,3-Butadiene	ND	0.25	ND	0.11	
74-83-9	Bromomethane	ND	0.12	ND	0.032	
75-00-3	Chloroethane	ND	0.12	ND	0.047	
64-17-5	Ethanol	ND	6.2	ND	3.3	
75-05-8	Acetonitrile	ND	0.62	ND	0.37	
107-02-8	Acrolein	ND	2.5	ND	1.1	
67-64-1	Acetone	ND	6.2	ND	2.6	
75-69-4	Trichlorofluoromethane	**1.4**	0.12	**0.25**	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.2	ND	2.5	
107-13-1	Acrylonitrile	ND	0.62	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.62	ND	0.18	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	**0.52**	0.12	**0.068**	0.016	
75-15-0	Carbon Disulfide	ND	6.2	ND	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.2	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	6.2	ND	2.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A2** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-002

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01873

Initial Pressure (psig): 0.45 Final Pressure (psig): 3.86

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.12	ND	0.031	
141-78-6	Ethyl Acetate	**1.6**	1.2	**0.45**	0.34	
110-54-3	n-Hexane	ND	0.62	ND	0.17	
67-66-3	Chloroform	ND	0.12	ND	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.62	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.023	
71-43-2	Benzene	**0.30**	0.12	**0.094**	0.039	
56-23-5	Carbon Tetrachloride	**0.58**	0.12	**0.092**	0.020	
110-82-7	Cyclohexane	ND	1.2	ND	0.36	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.027	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	**0.22**	0.12	**0.041**	0.023	
123-91-1	1,4-Dioxane	ND	0.62	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	n-Heptane	ND	0.62	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.62	ND	0.14	
108-10-1	4-Methyl-2-pentanone	ND	0.62	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.62	ND	0.14	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.023	
108-88-3	Toluene	**0.78**	0.62	**0.21**	0.16	
591-78-6	2-Hexanone	ND	0.62	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.62	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A2** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-002

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01873

Initial Pressure (psig): 0.45 Final Pressure (psig): 3.86

Canister Dilution Factor: 1.23

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.62	ND	0.13	
127-18-4	Tetrachloroethene	**2.3**	0.12	**0.33**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.027	
100-41-4	Ethylbenzene	ND	0.62	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.62	ND	0.14	
75-25-2	Bromoform	ND	0.62	ND	0.060	
100-42-5	Styrene	ND	0.62	ND	0.14	
95-47-6	o-Xylene	ND	0.62	ND	0.14	
111-84-2	n-Nonane	ND	0.62	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.62	ND	0.13	
80-56-8	alpha-Pinene	ND	0.62	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.62	ND	0.13	
622-96-8	4-Ethyltoluene	ND	0.62	ND	0.13	
108-67-8	1,3,5-Trimethylbenzene	ND	0.62	ND	0.13	
95-63-6	1,2,4-Trimethylbenzene	ND	0.62	ND	0.13	
100-44-7	Benzyl Chloride	ND	0.62	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.62	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.62	ND	0.064	
120-82-1	1,2,4-Trichlorobenzene	ND	0.62	ND	0.083	
91-20-3	Naphthalene	ND	0.62	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.62	ND	0.058	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A3** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-003

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00786

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.71

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**3.2**	0.60	**1.8**	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	0.60	**0.50**	0.12	
74-87-3	Chloromethane	ND	0.24	ND	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.60	ND	0.086	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.24	ND	0.11	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.045	
64-17-5	Ethanol	ND	6.0	ND	3.2	
75-05-8	Acetonitrile	ND	0.60	ND	0.36	
107-02-8	Acrolein	ND	2.4	ND	1.0	
67-64-1	Acetone	ND	6.0	ND	2.5	
75-69-4	Trichlorofluoromethane	**1.4**	0.12	**0.25**	0.021	
67-63-0	2-Propanol (Isopropyl Alcohol)	**6.1**	6.0	**2.5**	2.4	
107-13-1	Acrylonitrile	ND	0.60	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.030	
75-09-2	Methylene Chloride	ND	0.60	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.038	
76-13-1	Trichlorotrifluoroethane	**0.57**	0.12	**0.074**	0.016	
75-15-0	Carbon Disulfide	ND	6.0	ND	1.9	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.030	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.033	
108-05-4	Vinyl Acetate	ND	6.0	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	6.0	ND	2.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A3** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-003

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00786

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.71

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**0.39**	0.12	**0.098**	0.030	
141-78-6	Ethyl Acetate	**1.8**	1.2	**0.50**	0.33	
110-54-3	n-Hexane	ND	0.60	ND	0.17	
67-66-3	Chloroform	**0.24**	0.12	**0.049**	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.60	ND	0.20	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	**2.6**	0.12	**0.82**	0.038	
56-23-5	Carbon Tetrachloride	**0.65**	0.12	**0.10**	0.019	
110-82-7	Cyclohexane	ND	1.2	ND	0.35	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	**0.66**	0.12	**0.12**	0.022	
123-91-1	1,4-Dioxane	ND	0.60	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.29	
142-82-5	n-Heptane	ND	0.60	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.60	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.60	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.60	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	**0.74**	0.60	**0.20**	0.16	
591-78-6	2-Hexanone	ND	0.60	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.60	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A3** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-003

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00786

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.71

Canister Dilution Factor: 1.20

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.60	ND	0.13	
127-18-4	Tetrachloroethene	**6.4**	0.12	**0.95**	0.018	
108-90-7	Chlorobenzene	**0.22**	0.12	**0.048**	0.026	
100-41-4	Ethylbenzene	ND	0.60	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.60	ND	0.14	
75-25-2	Bromoform	ND	0.60	ND	0.058	
100-42-5	Styrene	ND	0.60	ND	0.14	
95-47-6	o-Xylene	ND	0.60	ND	0.14	
111-84-2	n-Nonane	ND	0.60	ND	0.11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.017	
98-82-8	Cumene	ND	0.60	ND	0.12	
80-56-8	alpha-Pinene	ND	0.60	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.60	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.60	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.60	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.60	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.60	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.60	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.60	ND	0.062	
120-82-1	1,2,4-Trichlorobenzene	ND	0.60	ND	0.081	
91-20-3	Naphthalene	ND	0.60	ND	0.11	
87-68-3	Hexachlorobutadiene	ND	0.60	ND	0.056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A4** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-004

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00341

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.83

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.61	**0.49**	0.12	
74-87-3	Chloromethane	**0.36**	0.24	**0.17**	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.24	ND	0.11	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	Ethanol	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	Acrolein	ND	2.4	ND	1.1	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	**1.4**	0.12	**0.25**	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.1	ND	2.5	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	**0.51**	0.12	**0.066**	0.016	
75-15-0	Carbon Disulfide	ND	6.1	ND	1.9	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	6.1	ND	2.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A4** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-004

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00341

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.83

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**0.23**	0.12	**0.057**	0.031	
141-78-6	Ethyl Acetate	**4.3**	1.2	**1.2**	0.34	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	**0.13**	0.12	**0.027**	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	**0.32**	0.12	**0.10**	0.038	
56-23-5	Carbon Tetrachloride	**0.54**	0.12	**0.086**	0.019	
110-82-7	Cyclohexane	ND	1.2	ND	0.35	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	**0.40**	0.12	**0.075**	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	**0.85**	0.61	**0.23**	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A4** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-004

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00341

Initial Pressure (psig): 0.66 Final Pressure (psig): 3.83

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	**4.1**	0.12	**0.61**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.61	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	Naphthalene	ND	0.61	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A5** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-005

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00338

Initial Pressure (psig): 0.49 Final Pressure (psig): 3.75

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.61	ND	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.61	**0.49**	0.12	
74-87-3	Chloromethane	ND	0.24	ND	0.12	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.61	ND	0.087	
75-01-4	Vinyl Chloride	ND	0.12	ND	0.047	
106-99-0	1,3-Butadiene	ND	0.24	ND	0.11	
74-83-9	Bromomethane	ND	0.12	ND	0.031	
75-00-3	Chloroethane	ND	0.12	ND	0.046	
64-17-5	Ethanol	ND	6.1	ND	3.2	
75-05-8	Acetonitrile	ND	0.61	ND	0.36	
107-02-8	Acrolein	ND	2.4	ND	1.1	
67-64-1	Acetone	ND	6.1	ND	2.5	
75-69-4	Trichlorofluoromethane	**1.4**	0.12	**0.26**	0.022	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.1	ND	2.5	
107-13-1	Acrylonitrile	ND	0.61	ND	0.28	
75-35-4	1,1-Dichloroethene	ND	0.12	ND	0.031	
75-09-2	Methylene Chloride	ND	0.61	ND	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.12	ND	0.039	
76-13-1	Trichlorotrifluoroethane	**0.58**	0.12	**0.076**	0.016	
75-15-0	Carbon Disulfide	ND	6.1	ND	1.9	
156-60-5	trans-1,2-Dichloroethene	ND	0.12	ND	0.031	
75-34-3	1,1-Dichloroethane	ND	0.12	ND	0.030	
1634-04-4	Methyl tert-Butyl Ether	ND	0.12	ND	0.034	
108-05-4	Vinyl Acetate	ND	6.1	ND	1.7	
78-93-3	2-Butanone (MEK)	ND	6.1	ND	2.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A5** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-005

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00338

Initial Pressure (psig): 0.49 Final Pressure (psig): 3.75

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**0.41**	0.12	**0.10**	0.031	
141-78-6	Ethyl Acetate	**2.1**	1.2	**0.57**	0.34	
110-54-3	n-Hexane	ND	0.61	ND	0.17	
67-66-3	Chloroform	**0.12**	0.12	**0.025**	0.025	
109-99-9	Tetrahydrofuran (THF)	ND	0.61	ND	0.21	
107-06-2	1,2-Dichloroethane	ND	0.12	ND	0.030	
71-55-6	1,1,1-Trichloroethane	ND	0.12	ND	0.022	
71-43-2	Benzene	**0.33**	0.12	**0.10**	0.038	
56-23-5	Carbon Tetrachloride	**0.59**	0.12	**0.094**	0.019	
110-82-7	Cyclohexane	ND	1.2	ND	0.35	
78-87-5	1,2-Dichloropropane	ND	0.12	ND	0.026	
75-27-4	Bromodichloromethane	ND	0.12	ND	0.018	
79-01-6	Trichloroethene	**0.72**	0.12	**0.13**	0.023	
123-91-1	1,4-Dioxane	ND	0.61	ND	0.17	
80-62-6	Methyl Methacrylate	ND	1.2	ND	0.30	
142-82-5	n-Heptane	ND	0.61	ND	0.15	
10061-01-5	cis-1,3-Dichloropropene	ND	0.61	ND	0.13	
108-10-1	4-Methyl-2-pentanone	ND	0.61	ND	0.15	
10061-02-6	trans-1,3-Dichloropropene	ND	0.61	ND	0.13	
79-00-5	1,1,2-Trichloroethane	ND	0.12	ND	0.022	
108-88-3	Toluene	**1.1**	0.61	**0.28**	0.16	
591-78-6	2-Hexanone	ND	0.61	ND	0.15	
124-48-1	Dibromochloromethane	ND	0.12	ND	0.014	
106-93-4	1,2-Dibromoethane	ND	0.12	ND	0.016	
123-86-4	n-Butyl Acetate	ND	0.61	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A5** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-005

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00338

Initial Pressure (psig): 0.49 Final Pressure (psig): 3.75

Canister Dilution Factor: 1.21

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.61	ND	0.13	
127-18-4	Tetrachloroethene	**6.9**	0.12	**1.0**	0.018	
108-90-7	Chlorobenzene	ND	0.12	ND	0.026	
100-41-4	Ethylbenzene	ND	0.61	ND	0.14	
179601-23-1	m,p-Xylenes	ND	0.61	ND	0.14	
75-25-2	Bromoform	ND	0.61	ND	0.059	
100-42-5	Styrene	ND	0.61	ND	0.14	
95-47-6	o-Xylene	ND	0.61	ND	0.14	
111-84-2	n-Nonane	ND	0.61	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.12	ND	0.018	
98-82-8	Cumene	ND	0.61	ND	0.12	
80-56-8	alpha-Pinene	ND	0.61	ND	0.11	
103-65-1	n-Propylbenzene	ND	0.61	ND	0.12	
622-96-8	4-Ethyltoluene	ND	0.61	ND	0.12	
108-67-8	1,3,5-Trimethylbenzene	ND	0.61	ND	0.12	
95-63-6	1,2,4-Trimethylbenzene	ND	0.61	ND	0.12	
100-44-7	Benzyl Chloride	ND	0.61	ND	0.12	
541-73-1	1,3-Dichlorobenzene	ND	0.12	ND	0.020	
106-46-7	1,4-Dichlorobenzene	ND	0.12	ND	0.020	
95-50-1	1,2-Dichlorobenzene	ND	0.12	ND	0.020	
5989-27-5	d-Limonene	ND	0.61	ND	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.61	ND	0.063	
120-82-1	1,2,4-Trichlorobenzene	ND	0.61	ND	0.082	
91-20-3	Naphthalene	ND	0.61	ND	0.12	
87-68-3	Hexachlorobutadiene	ND	0.61	ND	0.057	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A6** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-006

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00747

Initial Pressure (psig): -3.07 Final Pressure (psig): 3.52

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**0.81**	0.79	**0.47**	0.46	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	0.79	**0.49**	0.16	
74-87-3	Chloromethane	ND	0.31	ND	0.15	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.79	ND	0.11	
75-01-4	Vinyl Chloride	ND	0.16	ND	0.061	
106-99-0	1,3-Butadiene	ND	0.31	ND	0.14	
74-83-9	Bromomethane	ND	0.16	ND	0.040	
75-00-3	Chloroethane	ND	0.16	ND	0.060	
64-17-5	Ethanol	ND	7.9	ND	4.2	
75-05-8	Acetonitrile	ND	0.79	ND	0.47	
107-02-8	Acrolein	ND	3.1	ND	1.4	
67-64-1	Acetone	ND	7.9	ND	3.3	
75-69-4	Trichlorofluoromethane	**1.5**	0.16	**0.26**	0.028	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	7.9	ND	3.2	
107-13-1	Acrylonitrile	ND	0.79	ND	0.36	
75-35-4	1,1-Dichloroethene	ND	0.16	ND	0.040	
75-09-2	Methylene Chloride	ND	0.79	ND	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.16	ND	0.050	
76-13-1	Trichlorotrifluoroethane	**0.58**	0.16	**0.075**	0.020	
75-15-0	Carbon Disulfide	ND	7.9	ND	2.5	
156-60-5	trans-1,2-Dichloroethene	ND	0.16	ND	0.040	
75-34-3	1,1-Dichloroethane	ND	0.16	ND	0.039	
1634-04-4	Methyl tert-Butyl Ether	ND	0.16	ND	0.044	
108-05-4	Vinyl Acetate	ND	7.9	ND	2.2	
78-93-3	2-Butanone (MEK)	ND	7.9	ND	2.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A6** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-006

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00747

Initial Pressure (psig): -3.07 Final Pressure (psig): 3.52

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.16	ND	0.040	
141-78-6	Ethyl Acetate	**2.1**	1.6	**0.59**	0.44	
110-54-3	n-Hexane	ND	0.79	ND	0.22	
67-66-3	Chloroform	ND	0.16	ND	0.032	
109-99-9	Tetrahydrofuran (THF)	ND	0.79	ND	0.27	
107-06-2	1,2-Dichloroethane	ND	0.16	ND	0.039	
71-55-6	1,1,1-Trichloroethane	ND	0.16	ND	0.029	
71-43-2	Benzene	**0.57**	0.16	**0.18**	0.049	
56-23-5	Carbon Tetrachloride	**0.59**	0.16	**0.094**	0.025	
110-82-7	Cyclohexane	ND	1.6	ND	0.46	
78-87-5	1,2-Dichloropropane	ND	0.16	ND	0.034	
75-27-4	Bromodichloromethane	ND	0.16	ND	0.023	
79-01-6	Trichloroethene	**0.39**	0.16	**0.072**	0.029	
123-91-1	1,4-Dioxane	ND	0.79	ND	0.22	
80-62-6	Methyl Methacrylate	ND	1.6	ND	0.38	
142-82-5	n-Heptane	ND	0.79	ND	0.19	
10061-01-5	cis-1,3-Dichloropropene	ND	0.79	ND	0.17	
108-10-1	4-Methyl-2-pentanone	ND	0.79	ND	0.19	
10061-02-6	trans-1,3-Dichloropropene	ND	0.79	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.16	ND	0.029	
108-88-3	Toluene	**0.79**	0.79	**0.21**	0.21	
591-78-6	2-Hexanone	ND	0.79	ND	0.19	
124-48-1	Dibromochloromethane	ND	0.16	ND	0.018	
106-93-4	1,2-Dibromoethane	ND	0.16	ND	0.020	
123-86-4	n-Butyl Acetate	ND	0.79	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **A6** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P1404375-006

Test Code: EPA TO-15 Date Collected: 10/21/14
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/24/14
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00747

Initial Pressure (psig): -3.07 Final Pressure (psig): 3.52

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.79	ND	0.17	
127-18-4	Tetrachloroethene	**2.8**	0.16	**0.42**	0.023	
108-90-7	Chlorobenzene	ND	0.16	ND	0.034	
100-41-4	Ethylbenzene	ND	0.79	ND	0.18	
179601-23-1	m,p-Xylenes	ND	0.79	ND	0.18	
75-25-2	Bromoform	ND	0.79	ND	0.076	
100-42-5	Styrene	ND	0.79	ND	0.18	
95-47-6	o-Xylene	ND	0.79	ND	0.18	
111-84-2	n-Nonane	ND	0.79	ND	0.15	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.16	ND	0.023	
98-82-8	Cumene	ND	0.79	ND	0.16	
80-56-8	alpha-Pinene	ND	0.79	ND	0.14	
103-65-1	n-Propylbenzene	ND	0.79	ND	0.16	
622-96-8	4-Ethyltoluene	ND	0.79	ND	0.16	
108-67-8	1,3,5-Trimethylbenzene	ND	0.79	ND	0.16	
95-63-6	1,2,4-Trimethylbenzene	ND	0.79	ND	0.16	
100-44-7	Benzyl Chloride	ND	0.79	ND	0.15	
541-73-1	1,3-Dichlorobenzene	ND	0.16	ND	0.026	
106-46-7	1,4-Dichlorobenzene	ND	0.16	ND	0.026	
95-50-1	1,2-Dichlorobenzene	ND	0.16	ND	0.026	
5989-27-5	d-Limonene	ND	0.79	ND	0.14	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.79	ND	0.081	
120-82-1	1,2,4-Trichlorobenzene	ND	0.79	ND	0.11	
91-20-3	Naphthalene	ND	0.79	ND	0.15	
87-68-3	Hexachlorobutadiene	ND	0.79	ND	0.074	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Stratum Group, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.20	ND	0.097	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.20	ND	0.090	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Stratum Group, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P1404375

Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Wida Ang Date Analyzed: 11/4/14

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Stratum Group, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P1404375

Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Wida Ang Date Analyzed: 11/4/14

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Stratum Group, Inc.**
Client Project ID: **Cascade Laundry** ALS Project ID: P1404375

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 10/21/14
Analyst: Wida Ang Date(s) Received: 10/24/14
Sample Type: 6.0 L Silonite Canister(s) Date(s) Analyzed: 11/4 - 11/5/14
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P141104-MB	**120**	**97**	**107**	70-130	
Lab Control Sample	P141104-LCS	**117**	**96**	**108**	70-130	
A1	P1404375-001	**115**	**98**	**108**	70-130	
A2	P1404375-002	**116**	**97**	**108**	70-130	
A3	P1404375-003	**118**	**97**	**109**	70-130	
A4	P1404375-004	**119**	**96**	**106**	70-130	
A5	P1404375-005	**117**	**97**	**109**	70-130	
A6	P1404375-006	**120**	**97**	**108**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Stratum Group, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	200	**181**	**91**	50-128	
75-71-8	Dichlorodifluoromethane (CFC 12)	204	**201**	**99**	66-117	
74-87-3	Chloromethane	198	**169**	**85**	51-133	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	**212**	**103**	65-117	
75-01-4	Vinyl Chloride	202	**213**	**105**	61-127	
106-99-0	1,3-Butadiene	214	**234**	**109**	65-132	
74-83-9	Bromomethane	202	**206**	**102**	62-114	
75-00-3	Chloroethane	202	**196**	**97**	64-122	
64-17-5	Ethanol	1,020	**894**	**88**	57-131	
75-05-8	Acetonitrile	204	**178**	**87**	52-135	
107-02-8	Acrolein	214	**218**	**102**	64-124	
67-64-1	Acetone	1,080	**874**	**81**	60-113	
75-69-4	Trichlorofluoromethane	198	**225**	**114**	64-112	**L**
67-63-0	2-Propanol (Isopropyl Alcohol)	420	**384**	**91**	62-129	
107-13-1	Acrylonitrile	208	**194**	**93**	69-133	
75-35-4	1,1-Dichloroethene	214	**208**	**97**	70-114	
75-09-2	Methylene Chloride	216	**188**	**87**	63-103	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	218	**211**	**97**	57-135	
76-13-1	Trichlorotrifluoroethane	216	**201**	**93**	69-116	
75-15-0	Carbon Disulfide	196	**188**	**96**	66-118	
156-60-5	trans-1,2-Dichloroethene	212	**224**	**106**	69-123	
75-34-3	1,1-Dichloroethane	208	**200**	**96**	65-118	
1634-04-4	Methyl tert-Butyl Ether	212	**216**	**102**	57-125	
108-05-4	Vinyl Acetate	1,020	**1150**	**113**	69-131	
78-93-3	2-Butanone (MEK)	216	**201**	**93**	63-121	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Client: **Stratum Group, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	**Result µg/m³**	**% Recovery**	ALS Acceptance Limits	**Data Qualifier**
156-59-2	cis-1,2-Dichloroethene	214	**216**	**101**	69-119	
141-78-6	Ethyl Acetate	428	**414**	**97**	65-129	
110-54-3	n-Hexane	210	**186**	**89**	55-116	
67-66-3	Chloroform	216	**207**	**96**	68-111	
109-99-9	Tetrahydrofuran (THF)	206	**210**	**102**	69-120	
107-06-2	1,2-Dichloroethane	210	**227**	**108**	67-117	
71-55-6	1,1,1-Trichloroethane	208	**208**	**100**	74-116	
71-43-2	Benzene	220	**167**	**76**	61-109	
56-23-5	Carbon Tetrachloride	214	**240**	**112**	76-120	
110-82-7	Cyclohexane	422	**375**	**89**	72-115	
78-87-5	1,2-Dichloropropane	212	**181**	**85**	67-119	
75-27-4	Bromodichloromethane	216	**218**	**101**	78-124	
79-01-6	Trichloroethene	208	**197**	**95**	69-115	
123-91-1	1,4-Dioxane	218	**197**	**90**	69-127	
80-62-6	Methyl Methacrylate	420	**416**	**99**	76-128	
142-82-5	n-Heptane	214	**188**	**88**	66-118	
10061-01-5	cis-1,3-Dichloropropene	226	**234**	**104**	77-124	
108-10-1	4-Methyl-2-pentanone	218	**215**	**99**	66-134	
10061-02-6	trans-1,3-Dichloropropene	216	**246**	**114**	80-130	
79-00-5	1,1,2-Trichloroethane	212	**196**	**92**	75-119	
108-88-3	Toluene	212	**170**	**80**	68-114	
591-78-6	2-Hexanone	222	**201**	**91**	60-136	
124-48-1	Dibromochloromethane	220	**208**	**95**	75-132	
106-93-4	1,2-Dibromoethane	216	**194**	**90**	72-122	
123-86-4	n-Butyl Acetate	224	**201**	**90**	60-137	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Stratum Group, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1404375
Client Project ID: **Cascade Laundry** ALS Sample ID: P141104-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/5/14
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	208	**176**	**85**	66-120	
127-18-4	Tetrachloroethene	198	**167**	**84**	67-120	
108-90-7	Chlorobenzene	216	**176**	**81**	69-114	
100-41-4	Ethylbenzene	212	**183**	**86**	71-117	
179601-23-1	m,p-Xylenes	420	**366**	**87**	71-118	
75-25-2	Bromoform	216	**233**	**108**	76-149	
100-42-5	Styrene	218	**194**	**89**	71-128	
95-47-6	o-Xylene	206	**180**	**87**	72-118	
111-84-2	n-Nonane	204	**166**	**81**	63-123	
79-34-5	1,1,2,2-Tetrachloroethane	202	**178**	**88**	73-124	
98-82-8	Cumene	204	**174**	**85**	71-118	
80-56-8	alpha-Pinene	208	**179**	**86**	71-123	
103-65-1	n-Propylbenzene	202	**174**	**86**	71-120	
622-96-8	4-Ethyltoluene	212	**181**	**85**	71-121	
108-67-8	1,3,5-Trimethylbenzene	212	**183**	**86**	72-121	
95-63-6	1,2,4-Trimethylbenzene	210	**189**	**90**	71-122	
100-44-7	Benzyl Chloride	218	**231**	**106**	79-143	
541-73-1	1,3-Dichlorobenzene	218	**189**	**87**	67-121	
106-46-7	1,4-Dichlorobenzene	212	**175**	**83**	68-121	
95-50-1	1,2-Dichlorobenzene	214	**188**	**88**	68-121	
5989-27-5	d-Limonene	210	**184**	**88**	69-137	
96-12-8	1,2-Dibromo-3-chloropropane	206	**207**	**100**	73-145	
120-82-1	1,2,4-Trichlorobenzene	210	**209**	**100**	60-135	
91-20-3	Naphthalene	196	**214**	**109**	63-142	
87-68-3	Hexachlorobutadiene	214	**200**	**93**	65-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

October 29, 2014

Ms. Kim Ninnemann
Stratum Group
P.O. Box 2546
Bellingham, WA 98227

Dear Ms. Ninnemann,

On October 22nd, 2 samples were received by our laboratory and assigned our laboratory project number EV14100144. The project was identified as your Cascade Laundry. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE: ALS JOB#: ALS SAMPLE#:	10/29/2014 EV14100144 EV14100144-01
CLIENT CONTACT:	Kim Ninnemann	DATE RECEIVED:	10/22/2014
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	10/21/2014 1:20:00 PM
CLIENT SAMPLE ID	Sump - Sediment	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	**1600**	120	5	MG/KG	10/28/2014	EBS
TPH-Oil Range	NWTPH-DX	**5200**	250	5	MG/KG	10/28/2014	EBS
Dichlorodifluoromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Chloromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Vinyl Chloride	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Bromomethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Chloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Carbon Tetrachloride	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Trichlorofluoromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Carbon Disulfide	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Acetone	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
1,1-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Methylene Chloride	EPA-8260	U	20	1	ug/Kg	10/24/2014	DLC
Acrylonitrile	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
Methyl T-Butyl Ether	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1-Dichloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
2-Butanone	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
2,2-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Bromochloromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Chloroform	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1,1-Trichloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2-Dichloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Benzene	EPA-8260	U	5.0	1	ug/Kg	10/24/2014	DLC
Trichloroethene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Dibromomethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Bromodichloromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
4-Methyl-2-Pentanone	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
Toluene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1,2-Trichloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
2-Hexanone	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
1,3-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Tetrachloroethylene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE: ALS JOB#: ALS SAMPLE#:	10/29/2014 EV14100144 EV14100144-01
CLIENT CONTACT:	Kim Ninnemann	DATE RECEIVED:	10/22/2014
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	10/21/2014 1:20:00 PM
CLIENT SAMPLE ID	Sump - Sediment	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dibromochloromethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2-Dibromoethane	EPA-8260	U	5.0	1	ug/Kg	10/24/2014	DLC
Chlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Ethylbenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
m,p-Xylene	EPA-8260	U	20	1	ug/Kg	10/24/2014	DLC
Styrene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
o-Xylene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Bromoform	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Isopropylbenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2,3-Trichloropropane	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Bromobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
N-Propyl Benzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
2-Chlorotoluene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,3,5-Trimethylbenzene	EPA-8260	**11**	10	1	ug/Kg	10/24/2014	DLC
4-Chlorotoluene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
T-Butyl Benzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2,4-Trimethylbenzene	EPA-8260	**36**	10	1	ug/Kg	10/24/2014	DLC
S-Butyl Benzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
P-Isopropyltoluene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,3 Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,4-Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
N-Butylbenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2-Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	50	1	ug/Kg	10/24/2014	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Hexachlorobutadiene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
Naphthalene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/24/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 5X Dilution	NWTPH-DX	**122**	10/28/2014	EBS
1,2-Dichloroethane-d4	EPA-8260	**108**	10/24/2014	DLC
Toluene-d8	EPA-8260	**99.0**	10/24/2014	DLC
4-Bromofluorobenzene	EPA-8260	**138**	10/24/2014	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE: ALS JOB#: ALS SAMPLE#:	10/29/2014 EV14100144 EV14100144-01
CLIENT CONTACT:	Kim Ninnemann	DATE RECEIVED:	10/22/2014
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	10/21/2014 1:20:00 PM
CLIENT SAMPLE ID	Sump - Sediment	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel and lube oil.
Diesel range product results biased high due to oil range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE: ALS JOB#: ALS SAMPLE#:	10/29/2014 EV14100144 EV14100144-02
CLIENT CONTACT:	Kim Ninnemann	DATE RECEIVED:	10/22/2014
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	10/21/2014 1:15:00 PM
CLIENT SAMPLE ID	Sump - Water	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Chloromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	ug/L	10/23/2014	DLC
Bromomethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Chloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Acetone	EPA-8260	U	25	1	ug/L	10/23/2014	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Methylene Chloride	EPA-8260	U	5.0	1	ug/L	10/23/2014	DLC
Acrylonitrile	EPA-8260	U	10	1	ug/L	10/23/2014	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
2-Butanone	EPA-8260	U	10	1	ug/L	10/23/2014	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Bromochloromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Chloroform	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Benzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Trichloroethene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Dibromomethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	ug/L	10/23/2014	DLC
Toluene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
2-Hexanone	EPA-8260	U	10	1	ug/L	10/23/2014	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2-Dibromoethane	EPA-8260	U	0.01	1	ug/L	10/23/2014	DLC

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CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE: ALS JOB#: ALS SAMPLE#:	10/29/2014 EV14100144 EV14100144-02
CLIENT CONTACT:	Kim Ninnemann	DATE RECEIVED:	10/22/2014
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	10/21/2014 1:15:00 PM
CLIENT SAMPLE ID	Sump - Water	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Ethylbenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
m,p-Xylene	EPA-8260	U	4.0	1	ug/L	10/23/2014	DLC
Styrene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
o-Xylene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Bromoform	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Bromobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	ug/L	10/23/2014	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
Naphthalene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/23/2014	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	**98.4**	10/23/2014	DLC
Toluene-d8	EPA-8260	**102**	10/23/2014	DLC
4-Bromofluorobenzene	EPA-8260	**100**	10/23/2014	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Stratum Group
P.O. Box 2546
Bellingham, WA 98227

CLIENT CONTACT: Kim Ninnemann
CLIENT PROJECT: Cascade Laundry

DATE: 10/29/2014
ALS SDG#: EV14100144
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-102114S2 - Batch 87185 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	10/21/2014	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	10/21/2014	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-102314S - Batch 87329 - Soil by EPA-8260

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Chloromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Vinyl Chloride	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Bromomethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Chloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Carbon Tetrachloride	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Trichlorofluoromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Carbon Disulfide	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Acetone	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
1,1-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Methylene Chloride	EPA-8260	U	20	1	ug/Kg	10/23/2014	DLC
Acrylonitrile	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
Methyl T-Butyl Ether	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1-Dichloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
2-Butanone	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
2,2-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Bromochloromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Chloroform	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1,1-Trichloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2-Dichloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Benzene	EPA-8260	U	5.0	1	ug/Kg	10/23/2014	DLC
Trichloroethene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Dibromomethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Bromodichloromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
4-Methyl-2-Pentanone	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
Toluene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC

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CERTIFICATE OF ANALYSIS

CLIENT: Stratum Group
P.O. Box 2546
Bellingham, WA 98227

CLIENT CONTACT: Kim Ninnemann
CLIENT PROJECT: Cascade Laundry

DATE: 10/29/2014
ALS SDG#: EV14100144
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-102314S - Batch 87329 - Soil by EPA-8260

Cis-1,3-Dichloropropene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1,2-Trichloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
2-Hexanone	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
1,3-Dichloropropane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Tetrachloroethylene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Dibromochloromethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2-Dibromoethane	EPA-8260	U	5.0	1	ug/Kg	10/23/2014	DLC
Chlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Ethylbenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
m,p-Xylene	EPA-8260	U	20	1	ug/Kg	10/23/2014	DLC
Styrene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
o-Xylene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Bromoform	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Isopropylbenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2,3-Trichloropropane	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Bromobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
N-Propyl Benzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
2-Chlorotoluene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
4-Chlorotoluene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
T-Butyl Benzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
S-Butyl Benzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
P-Isopropyltoluene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,3 Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,4-Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
N-Butylbenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2-Dichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	50	1	ug/Kg	10/23/2014	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Hexachlorobutadiene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
Naphthalene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	10	1	ug/Kg	10/23/2014	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT: Stratum Group
P.O. Box 2546
Bellingham, WA 98227
CLIENT CONTACT: Kim Ninnemann
CLIENT PROJECT: Cascade Laundry

DATE: 10/29/2014
ALS SDG#: EV14100144
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-102214W - Batch 87186 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Chloromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	ug/L	10/22/2014	DLC
Bromomethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Chloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Carbon Disulfide	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Acetone	EPA-8260	U	25	1	ug/L	10/22/2014	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Methylene Chloride	EPA-8260	U	5.0	1	ug/L	10/22/2014	DLC
Acrylonitrile	EPA-8260	U	10	1	ug/L	10/22/2014	DLC
Methyl T-Butyl Ether	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
2-Butanone	EPA-8260	U	10	1	ug/L	10/22/2014	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Bromochloromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Chloroform	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Benzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Trichloroethene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Dibromomethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
4-Methyl-2-Pentanone	EPA-8260	U	10	1	ug/L	10/22/2014	DLC
Toluene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
2-Hexanone	EPA-8260	U	10	1	ug/L	10/22/2014	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2-Dibromoethane	EPA-8260	U	0.01	1	ug/L	10/22/2014	DLC

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE:	10/29/2014
		ALS SDG#:	EV14100144
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Kim Ninnemann		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY BLANK RESULTS

MB-102214W - Batch 87186 - Water by EPA-8260

Chlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Ethylbenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
m,p-Xylene	EPA-8260	U	4.0	1	ug/L	10/22/2014	DLC
Styrene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
o-Xylene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Bromoform	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Isopropylbenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Bromobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
N-Propyl Benzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,3,5-Trimethylbenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
T-Butyl Benzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2,4-Trimethylbenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
S-Butyl Benzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
P-Isopropyltoluene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,3 Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
N-Butylbenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	ug/L	10/22/2014	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
Naphthalene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	ug/L	10/22/2014	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Stratum Group P.O. Box 2546 Bellingham, WA 98227	DATE:	10/29/2014
		ALS SDG#:	EV14100144
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Kim Ninnemann		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 87185 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	**96.6**			10/22/2014	EBS
TPH-Diesel Range - BSD	NWTPH-DX	**87.0**	**10**		10/21/2014	EBS

ALS Test Batch ID: 87329 - Soil by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**94.3**			10/23/2014	DLC
1,1-Dichloroethene - BSD	EPA-8260	**113**	**18**		10/23/2014	DLC
Benzene - BS	EPA-8260	**97.4**			10/23/2014	DLC
Benzene - BSD	EPA-8260	**90.5**	**7**		10/23/2014	DLC
Trichloroethene - BS	EPA-8260	**93.4**			10/23/2014	DLC
Trichloroethene - BSD	EPA-8260	**85.8**	**8**		10/23/2014	DLC
Toluene - BS	EPA-8260	**95.8**			10/23/2014	DLC
Toluene - BSD	EPA-8260	**91.0**	**5**		10/23/2014	DLC
Chlorobenzene - BS	EPA-8260	**90.5**			10/23/2014	DLC
Chlorobenzene - BSD	EPA-8260	**87.6**	**3**		10/23/2014	DLC

ALS Test Batch ID: 87186 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**111**			10/22/2014	DLC
1,1-Dichloroethene - BSD	EPA-8260	**90.6**	**20**		10/22/2014	DLC
Benzene - BS	EPA-8260	**113**			10/22/2014	DLC
Benzene - BSD	EPA-8260	**99.4**	**13**		10/22/2014	DLC
Trichloroethene - BS	EPA-8260	**112**			10/22/2014	DLC
Trichloroethene - BSD	EPA-8260	**98.9**	**12**		10/22/2014	DLC
Toluene - BS	EPA-8260	**106**			10/22/2014	DLC
Toluene - BSD	EPA-8260	**92.8**	**13**		10/22/2014	DLC
Chlorobenzene - BS	EPA-8260	**108**			10/22/2014	DLC
Chlorobenzene - BSD	EPA-8260	**97.9**	**10**		10/22/2014	DLC

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV 14100144

Date 10/21/14 Page 1 Of 1

PROJECT ID: Cascade Laundry
REPORT TO COMPANY: Stratum Group
PROJECT MANAGER: Kim Nimmermann
ADDRESS: Po Box 2546
Bellingham, WA 98227
PHONE: 360-714-9409 FAX: 360-715-1740
P.O. #: Cascade Laundry E-MAIL: stratumgroup@qwestoffice.net
INVOICE TO COMPANY:
ATTENTION: Sonja Max
ADDRESS: 914 12th St, Bellingham, WA 98225
Sonjamax@gmail.com

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. Sump - Sediment	10/21/14	1:20	Soil	1		X					X									4	
2. Sump - water	↓	1:15	water	2							X									2	
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Kim Nimmermann Stratum Group 10/21/14 4:50p
Received By: Gavin Hale 10/21/14
2. Relinquished By: "
Received By: ALS 10/21/14 4:15

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ~~10~~ Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

APPENDIX III

Underground Storage Tank Site Check/Site Assessment Checklist (Welch, 1992)

Tank Removal Report (Whatcom Environmental Services, 2010)

Phase I and Phase II Environmental Site Assessment (Stratum Group, 2006)

Phase II Environmental Borings (GeoEngineers, 2007)

Site Characterization Report (Whatcom Environmental Services, March 2011)

Site Characterization Report – Building Interior Soil Borings (Whatcom Environmental Services, 2012)

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

The purpose of this form is to certify the proper investigation of an UST site for the presence of a release. These activities shall be conducted in accordance with Chapter 173.360 WAC. A description of the various situations requiring a site check or site assessment is provided in the guidance document for UST site checks and site assessments.

This Site Check/Site Assessment Checklist shall be completed and signed by a person registered with the Department of Ecology to perform site assessments.

Two copies of the results of the site check or site assessment should be included with this checklist according to the reporting requirements in the guidance document for UST site checks and site assessments.

For further information about completing this form, please contact the Department of Ecology UST Program.

The completed checklist should be mailed to the following address:

DEPARTMENT OF ECOLOGY
UNDERGROUND STORAGE TANK

JAN 27 1992

Underground Storage Tank Section
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

1. UST SYSTEM OWNER AND LOCATION

UST Owner/Operator: Cascade Laundry & Cleaners, Inc.

Owners Address: 205 Prospect (Street) (P.O. Box)

Bellingham (City) WA (State) 98225 (ZIP-Code)

Telephone: (206) 734-4200

Site ID Number (on invoice or available from Ecology if tank is registered): 005617

Site/Business Name: Cascade Laundry & Cleaners, Inc.

Site Address: 205 Prospect (Street) Whatcom (County)

Bellingham (City) WA (State) 98225 (ZIP-Code)

2. SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Registered Person: Robert H. Welch

Address: POB 366 (315 Main, Suite A) (Street) (P.O. Box)

Mount Vernon (City) WA (State) 98273 (ZIP-Code)

Telephone: (206) 336-9579

3. TANK INFORMATION

1. Tank ID Number (as registered with Ecology): 005617
2. Year Installed: 1978
3. Tank capacity in gallons: 500
4. Last substance stored: gasoline

4. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

_____ Investigate suspected release due to on-site environmental contamination

_____ Investigate suspected release due to off-site environmental contamination

_____ Extend temporary closure of UST system for more than 12 months

_____ UST system undergoing change-in-service

__X__ UST system permanently closed-in-place

_____ UST system permanently closed with tank removed

_____ Required by Ecology or delegated agency for UST system closed before December 22, 1988

_____ Other (describe): _____

5. CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	Yes	No
1. Has the site check/site assessment been conducted according to applicable procedures specified in the UST site check/site assessment guidance issued by the Department of Ecology?	X	
2. Has a release from the UST system been confirmed? *NOTE: Owners/operators must report all confirmed releases to the Department of Ecology or delegated agency within 24 hours.*		X
3. Are the results of the site check/site assessment enclosed with this checklist? *NOTE: Two copies of the site check/site assessment results must be submitted to the Department of Ecology according to the reporting requirements specified in the UST site check/site assessment guidance.*	X	

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

1/23/92
Date

Robert H. Welch
Signature of Person Registered with Ecology

6. OWNER'S SIGNATURE

1/23/92
Date

Robert H. Welch, by auth.
Signature of Tank Owner or Authorized Representative

whatcom
ENVIRONMENTAL

soil | water | air
compliance consulting

228 East Champion Street, Suite 101
Bellingham, WA 98225
tel 360.752.9571 | **fax** 360.752.9573
www.whatcomenvironmental.com

November 8, 2010

Mrs. Diana O'Hara
Cascade Laundry and Cleaners, Inc.
193 East Laurel Road
Bellingham, WA 98226

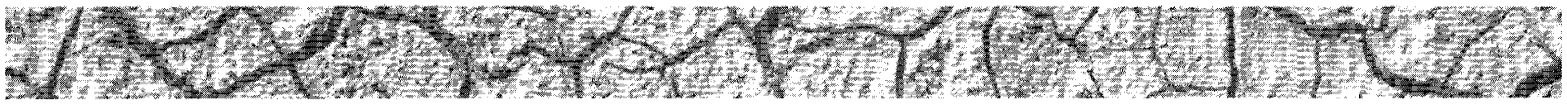
RE: Underground Storage Tank Site Assessment at Closure – Cascade Laundry Facility, 205 Prospect Street, Bellingham, Washington (FSID# 21786898)

Mrs. O'Hara:

Whatcom Environmental Services Inc. has completed a Site Assessment of an Underground Storage Tank (UST) closure conducted at 205 Prospect Street in Bellingham, Washington. The property owner is Cascade Laundry & Cleaners. Whatcom Environmental conducted the UST Site Assessment at the time two abandoned USTs (one 3,200 gallon Bunker C tank and one 300 gallon tetrachloroethylene [PERC] tank) were closed and removed from the ground. Soil samples were collected from native soils on the sidewalls and the floor of the two tank-pit excavations in accordance with Washington State Department of Ecology (Ecology) UST Site Assessment guidance standards (Ecology, 2003).

Field screening and soil sample analytical results indicated that a release of petroleum products has occurred to soil at the site from the PERC UST system.

This letter report was prepared by Whatcom Environmental and the information provided in the report supplements the completed UST Site Check/Site Assessment Checklist, included as Appendix A.



Site Setting

The two abandoned USTs were formerly located at the Cascade Laundry building at 205 Prospect Street in Bellingham, Washington. The site is located in an area zoned Commercial by the City of Bellingham. The subject property is located approximately 0.1 miles northeast of the mouth of Whatcom Creek and has a median elevation of 60 feet above mean sea level. The site is relatively level but does slope slightly towards the west. A site location map is provided as Figure 1.

The removed USTs consisted of one 3,200 gallon tank and one 300 gallon tank. The abandoned tanks were assumed to have historically stored Bunker C fuel oil and PERC for dry cleaning based on the history of the subject property and anecdotal evidence provided by the owner. The subject property is listed in the Washington State UST databases and has an associated Facility Site Identification number of 21786898. A map showing the location of the two removed tanks and other pertinent site features is provided as Figure 2.

One additional UST is listed in the UST database entry for the subject property. This "gasoline" UST was reported by the owner to have been decommissioned at some time in the past. The tank location was reported to have been on the west side of the Cascade Laundry facility, near the boiler room entrance.

Soils in the area of the subject property are described in the Soil Survey of Whatcom County Area Washington (USDA, 1992). Soils at the property are described as Urban land with slopes from 0 to 3 percent. Urban land consists of buildings, paved streets and parking lots where identification of soils is impractical.

The property is underlain by Bellingham Glaciomarine drift which consists of moderately sorted to unsorted diamicton with lenses and discontinuous beds of moderately to well-sorted gravel, sand, silt, and clay. Bedding is massive to poorly stratified. Color is blue-gray to olive-gray depending on oxidation state. Thickness ranges to as much as 90 meters. The unit is consistently firm to very hard, depending on moisture content. The unit is predominantly dry to slightly moist (WSDNR, 2000). The unit acts as an aquitard, impeding vertical migration of contaminants.

The depth to groundwater at the site on the day the tanks were removed is unknown. An online search of the Washington State Well Log Database (http://apps.ecy.wa.gov/welllog/) was conducted and one soil boring was discovered.

The boring was drilled to a depth of 27 feet below ground surface (bgs) at the subject property in August of 2007. A temporary stainless steel well screen was used to collect a groundwater sample. The static water level reported on the bore log was 12 feet bgs. No groundwater wells were located on the subject property in the vicinity of the UST pits, therefore no groundwater investigation was undertaken as part of this UST Site Assessment. A copy of the bore log located on the WA State Well Log Database is provided in Appendix B.

Tank Closure

Mr. Thomas Davis of Whatcom Environmental Services observed the removal of the USTs from the property on October 13, 2010. Mr. Davis is a registered underground storage tank site assessor. Western Refinery Services (WRS) provided excavation services and WL Repair of Ferndale, Washington conducted the UST closure services during the UST decommissioning and removal.

The two tanks were located in separate excavations. The bunker tank was overlain by approximately 1 foot of overburden and the PERC tank was overlain by approximately 4 feet of overburden. Both tanks were bedded in what appeared to be native backfill material. A map showing the approximate location of the two USTs is provided as Figure 2.

Tank 1-N (ID# 37818) – Bunker C Fuel Oil

The northern UST, Tank 1-N, was a 3,200 gallon, single-walled, steel tank which measured approximately 6.25 feet in diameter and was approximately 14 feet long. Approximately 7 inches of residual oil were removed from the tank prior to excavation and removal from the ground.

The installation date of the tank is unknown. The tank was reportedly used to store Bunker C fuel oil for the laundry's boiler. The tank was abandoned at some unknown time in the past. The tank vent line had been cut-off to ground level. Product piping was located above the tank, within the tank pit and the tank was situated directly adjacent to the building wall; therefore, no piping samples were collected.

No leak detection or corrosion protection systems were associated with Tank 1-N. The tank steel appeared in poor condition with excessive corrosion and scaling when it was removed from the ground. No holes were observed in the tank exterior.

Tank 1-S (ID# 37641) – PERC

The southern UST, Tank 1-S, was a 300 gallon, single-walled, steel tank which measured approximately 3.17 feet in diameter and was approximately 5 feet long. Western Refinery Services pumped approximately 225 gallons of water (4.25 drums) from the tank prior to excavation and removal. Approximately 6 inches of residual sludge remained in the tank when it was removed from the ground.

The installation date of the tank is unknown. The tank was reportedly used to store tetrachloroethylene [PERC] for the laundry's dry cleaning section. The PERC tank was abandoned at some unknown time in the past. The tank vent line had been cut-off to ground level. Product piping was located above the tank, within the tank pit and the tank was situated directly adjacent to the building wall; therefore, no piping samples were collected.

No leak detection or corrosion protection systems were associated with Tank 1-S. The tank steel appeared in poor condition with excessive corrosion and pitting when it was removed from the ground. No holes were observed in the tank exterior, however, excessive oxidation of the tank steel left a veneer of welded gravel on the tank which was not removed due to fear of compromising the integrity of the tank which still contained some residual sludge.

Site Assessment Soil Sampling

During the UST removal, excavated soil was field screened by conducting sheen tests and by conducting organic vapor analysis using a photoionization detector (PID). Soil samples were collected from the tank-pit excavations after the tanks were removed from the excavations. Any contaminated tank-pit backfill material was placed back in the excavation for removal at a later date.

Six discrete soil samples were collected from the tank-pit excavations as part of this UST Site Assessment; one sample from beneath each tank on the excavation floor and two samples from two sidewalls in each tank-pit. Two composite samples were collected from the clean overburden stockpiles associated with each UST. All soil samples were collected from native soils using EPA Method 5035A. Soil samples were collected using stainless steel sampling tools. Soil was placed in clean sample containers provided by the lab, cooled with ice in a cooler, and shipped to ALS

Laboratory Group in Everett, Washington. ALS is accredited by Ecology. The Site Assessment soil sample locations are shown on Figure 2.

The Bunker C tank pit Site Assessment soil samples were analyzed for diesel range Total Petroleum Hydrocarbons (TPH) using Method NWTPH-Dx; benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021; arsenic, cadmium, chromium, and lead using Method EPA 6020; and mercury using Method EPA 7471.

The PERC tank pit Site Assessment soil samples were analyzed for gasoline range TPH using Method NWTPH-Gx; benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021; and halogenated volatiles using EPA Method 8260.

Analytical results were compared to the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land-use.

Site Assessment Soil Sample Descriptions and Analytical Results

Soil samples collected from the two UST excavations consisted generally of brown silty fine sand to silty clay that ranged from loose to firm depending on the moisture content and the depth collected. A complete list of soil sample descriptions, locations, depths of collection, and field screening results is included in Table 1.

Laboratory analytical results indicated that none of the soil samples collected from the clean overburden stockpile, native sidewalls or floor of the Bunker C UST excavation contained concentrations of diesel range TPH, BTEX constituents, or metals at levels exceeding the MTCA Method A cleanup criteria. A summary of laboratory analytical results is provided in Table 2. The original analytical data reports are included in Appendix C.

Laboratory analytical results for samples collected from the PERC UST excavation indicated that soil in the vicinity of Tank 1-S contained concentrations of gasoline range TPH, xylenes, and PERC at concentrations that exceed the MTCA Method A cleanup levels. The PERC tank clean overburden stockpile soil samples did not contain concentrations of contaminants that exceeded the MTCA Method A cleanup levels. The stockpile samples indicate that contaminated soils were successfully segregated from clean soils.

Conclusions

Two abandoned USTs were decommissioned and removed from the ground at the Cascade Laundry facility located at 205 Prospect Street in Bellingham, Washington. The tanks were located in separate tank pits with a 3,200 gallon Bunker C fuel oil UST situated to the north and a 300 gallon PERC UST located to the south. The two tanks were removed from the ground on October 13, 2010.

Whatcom Environmental Services conducted a UST Site Assessment when the tanks were removed from the ground. Whatcom Environmental personnel field screened excavated soil and observed field evidence indicating that a release of petroleum products had occurred from the PERC UST, but not from the Bunker C tank. After the tank-pit backfill material was removed from the excavations and the floors and sidewalls of the excavations were scraped back to the native silty clay, soil samples were collected per UST Site Assessment guidelines. The analytical results from the Site Assessment samples confirmed that a release had occurred from the PERC tank.

No water was encountered in either UST excavation. A bore log from a boring drilled in 2007 indicated a water level 12 feet below the ground surface at the subject property. The deepest soil sample collected as part of the UST site assessment was collected at 9 feet bgs, three feet above the estimated high water mark. Therefore, no groundwater investigation was conducted at the site.

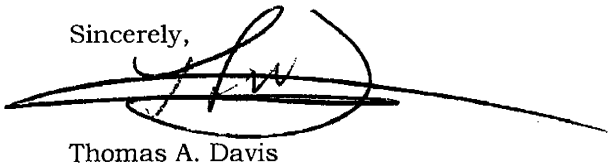
Limitations

No site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this work by Whatcom Environmental is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination.

Whatcom Environmental Services, Inc. has prepared this report for the exclusive use of Cascade Laundry and Cleaners, Inc., its authorized agents, and regulatory agencies. This report is not intended for use by others and the information contained herein is not applicable to other sites.

Please use this letter and the attached site location figures, UST Site Check/Site Assessment Checklist, and soil analytical data to document compliance with Underground Storage Tank requirements (WAC 173-360).

Sincerely,



Thomas A. Davis
Project Manager, Whatcom Environmental Services
WA UST Site Assessor #5252393-U7

References

U.S. Department of Agriculture (USDA). 1992. Soil Survey of Whatcom County Area, Washington. Soil Conservation Service. 481 pp.

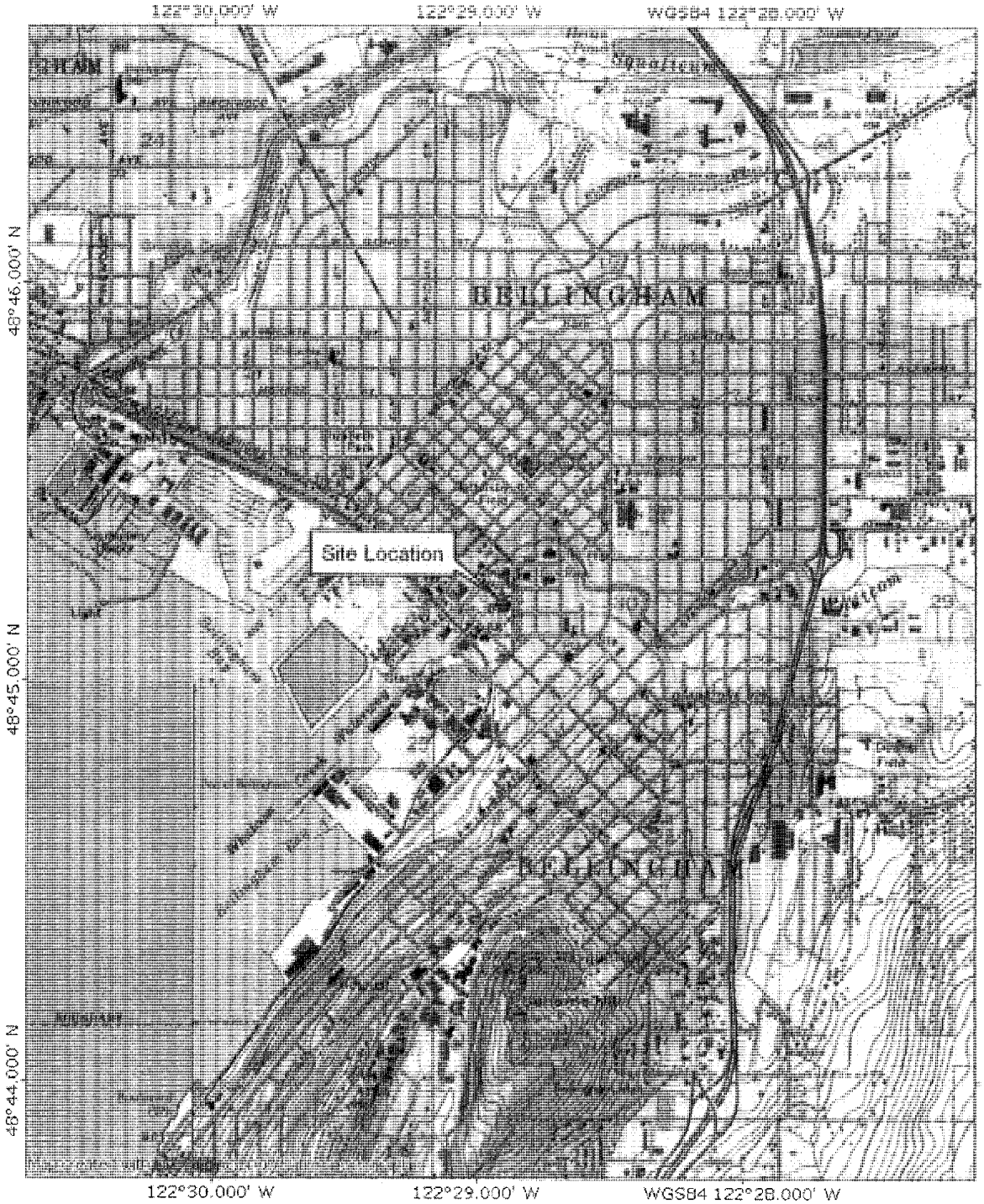
Washington State Department of Ecology. 1998. Underground Storage Tank Statute and Regulations Chapter 173-360 WAC. Publication No. 95-604.

Washington State Department of Ecology. 2001. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06. February 12, 2001.

Washington State Department of Ecology. 2003. Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Publication # 90-52.

Washington State Department of Natural Resources (WADNR). 2000. Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington. Open File Report 2000-5.

TOPO! map printed on 11/05/10, 48°45.202' N, 122°28.912' W WGS84



NATIONAL GEOGRAPHIC

0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TN 17° MN
11/05/10

Prepared for:	Prepared by:	Site Location Map
Cascade Laundry	AMEC ENVIRONMENTAL	Cascade Laundry 11/5/10 — Figure 1

Sample Locations | Excavations | Tank Locations | Stockpiles

All data are approximate and should be used as relative location reference only.
2002 Aerial Photograph (ftp.cob.org)

0 4.5 0 9 18 27 36 Feet
1 inch equals 20 feet

Prepared for:
Cascade Laundry

Prepared by:
Northwest Environmental

UST and Soil Sample Location Map

Cascade Laundry
11/5/10

Figure 2

Table 1. Soil Sample Descriptions - Cascade Laundry Site - 205 Prospect St., Bellingham, WA

Sample ID*	Date	Depth (ft)	Location and Description	Sheen Test	PID (ppm)
Bunker West - 5ft	10/13/2010	5.0	Collected from the west sidewall at approximately 1 foot above the bottom of the tank Silty fine sand, brown, loose, slightly moist	Very Slight Sheen	0.0
Bunker North - 5ft	10/13/2010	5.0	Collected from the north sidewall at approximately 1 foot above the bottom of the tank Silty fine sand, brown, loose, slightly moist	Very Slight Sheen	0.0
Bunker Stockpile	10/13/2010	--	Collected as a composite from 3 locations in the excavated soil stockpile associated with the Bunker C tank Fine sandy silt with minor organics, dark brown, loose, slightly moist	Very Slight Sheen	0.0
Bunker Floor - 8ft	10/13/2010	8.0	Collected from the excavation floor at approximately 1 foot below the bottom of the tank Silty clay, brown, firm, dry	No Sheen	0.0
PERC South - 7ft	10/13/2010	7.0	Collected from the south sidewall at approximately 1 foot above the bottom of the tank Silty clay, dark brown, firm, moist	Moderate Sheen	923
PERC West - 7ft	10/13/2010	7.0	Collected from the west sidewall at approximately 1 foot above the bottom of the tank Clayey silt with minor gravel, dark brown to black, plastic, sticky, wet	Moderate Sheen	897
PERC Floor - 9ft	10/13/2010	9.0	Collected from the excavation floor at approximately 1 foot below the bottom of the tank Clayey silt with gravel, dark gray to black, sticky, wet	Heavy Sheen	932
PERC Stockpile	10/13/2010	--	Collected as a composite from 3 locations in the excavated clean overburden soil stockpile associated with the PERC tank Silty fine sand, brown, loose, slightly moist	Slight Sheen	0.0

* - Samples collected using EPA Method 5035A

Table 2. Soil Sample TPH & BTEX Analytical Results - Cascade Laundry Site - 205 Prospect St., Bellingham, WA

Sample ID	Date	NWTPH-Dx Diesel Range mg/kg	NWTPH-Dx Lube-Oil Range mg/kg	NWTPH-Gx Gasoline Range mg/kg	EPA-8021 Benzene mg/kg	EPA-8021 Toluene mg/kg	EPA-8021 Ethylbenzene mg/kg	EPA-8021 Xylenes mg/kg
Bunker West - 5ft	10/13/2010	ND(<25)	ND(<50)	NA	ND(<0.030)	ND(<0.050)	ND(<0.050)	ND(<0.20)
Bunker North - 5ft	10/13/2010	ND(<25)	57	NA	ND(<0.030)	ND(<0.050)	ND(<0.050)	ND(<0.20)
Bunker Stockpile	10/13/2010	ND(<25)	160	NA	ND(<0.030)	ND(<0.050)	ND(<0.050)	ND(<0.20)
Bunker Floor - 8ft	10/13/2010	ND(<25)	ND(<50)	NA	ND(<0.030)	ND(<0.050)	ND(<0.050)	ND(<0.20)
PERC South - 7ft	10/13/2010	NA	NA	NA	NA	NA	NA	NA
PERC West - 7ft	10/13/2010	NA	NA	**1,000**	ND(<0.03)	ND(<0.05)	2.6	**13**
PERC Floor - 9ft	10/13/2010	NA	NA	**820**	ND(<0.03)	ND(<0.05)	2.2	**12**
PERC Stockpile	10/13/2010	NA	NA	NA	NA	NA	NA	NA
MTCA Method A Cleanup Levels		2,000	2,000	30/100*	0.03	7	6	9

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

NA- indicates that the sample was not analyzed for the specified analyte

Bold - Sample exceeded the MTCA Method A target cleanup level

* cleanup level depends on BTEX concentration

Table 3. Soil Sample VOC & Metals Analytical Results - Cascade Laundry Site - 205 Prospect St., Bellingham, WA

Sample ID	Date	EPA-8260* Methylene chloride mg/kg	EPA-8260* Tetrachloroethylene mg/kg	EPA-6020 Arsenic mg/kg	EPA-6020 Cadmium mg/kg	EPA-6020 Chromium mg/kg	EPA-7471 Mercury mg/kg	EPA-6020 Lead mg/kg
Bunker West - 5ft	10/13/2010	NA	NA	NA	NA	NA	NA	NA
Bunker North - 5ft	10/13/2010	NA	NA	4.2	ND(<1.3)	40	0.066	24
Bunker Stockpile	10/13/2010	NA	NA	NA	NA	NA	NA	NA
Bunker Floor - 8ft	10/13/2010	NA	NA	NA	NA	NA	NA	NA
PERC South - 7ft	10/13/2010	ND(<0.2)	**0.370**	NA	NA	NA	NA	NA
PERC West - 7ft	10/13/2010	ND(<0.23)	**0.098**	NA	NA	NA	NA	NA
PERC Floor - 9ft	10/13/2010	ND(<0.25)	**0.091**	NA	NA	NA	NA	NA
PERC Stockpile	10/13/2010	ND(<0.02)	ND(<0.01)	NA	NA	NA	NA	NA
MTCA Method A Cleanup Levels		0.02	0.05	20	2	2,000	2	250

* The full list of Volatile Organic Compounds (VOCs) and results is included in Appendix B

NA- indicates that the sample was not analyzed for the specified analyte

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

Bold - Sample exceeded the MTCA Method A target cleanup level

APPENDIX A

UST Site Check/Site Assessment Checklist

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

FOR OFFICE USE ONLY
Site #: _____
Owner #: _____

INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by IFCI or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This information must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
PO Box 47655
Olympia WA 98504-7655

SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): 5617 (FSID#: 21786898)
Site/Business Name: Cascade Laundry Corp
Site Address: 205 Prospect St. (Street) Telephone: (360) 671-7200
Bellingham (City) WA (State) 98225 (Zip Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
1-N (ID#: 37818)	3,200 gallons	Bunker C Fuel Oil
1-S (ID#: 37641)	300 gallons	PERC

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

_____ Investigate suspected release due to on-site environmental contamination.
_____ Investigate suspected release due to off-site environmental contamination.
_____ Extend temporary closure of UST system for more than 12 months.
_____ UST system undergoing change-in-service.
XXXXX UST system permanently closed with tank removed.
_____ Abandoned tank containing product.
_____ Required by Ecology or delegated agency for UST system closed before 12/22/88.
_____ Other (describe): _____

CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.	YES	NO
1. The location of the UST site is shown on a vicinity map.	ll	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	ll	
3. A summary of UST system data is provided. (see Section 3.1.)	ll	
4. The soils characteristics at the UST site are described. (see Section 5.2)	ll	
5. Is there any apparent groundwater in the tank excavation?		ll
6. A brief description of the surrounding land use is provided. (see Section 3.1)	ll	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	ll	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	ll	
- groundwater samples distinguished from soil samples (if applicable)	ll	
- samples collected from stockpiled excavated soil	ll	
- tank and piping locations and limits of excavation pit	ll	
- adjacent structures and streets	ll	
- approximate locations of any on-site and nearby utilities	ll	
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	ll	
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.	ll	
11. Any factors that may have compromised the quality of the data or validity of the results are described.	ll	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	ll	

SITE ASSESSOR INFORMATION

Thomas A. Davis — Person registered with Ecology

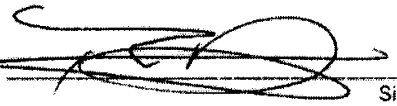
Whatcom Environmental Services, Inc. — Firm Affiliated with

Business Address: **228 East Champion Street, Suite 101** (Street) Telephone: (360) **752-9571**

Bellingham (City) **WA** (State) **98225** (Zip Code)

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

11/5/10 (Date)



Signature of Person Registered with Ecology

WA UST Site Assessor #: 5252393-U7

APPENDIX B

WA State Well Log Database
Cascade Laundry 2007 Bore Log

277024 Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. E007966

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner Cascade Laundry & Cleaners

Site Address 205 Prospect Street

Consulting Firm GeoEngineers

City Bellingham County Whatcom

Unique Ecology Well IDTag No. BL

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Location NE1/4-1/4 SW1/4 Sec 30 Twn 38N R 03

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

☐ Driller ☐ Engineer ☒ Trainee

Name (Print Last, First Name) Gogan, Scott

Driller/Engineer /Trainee Signature

Driller or Trainee License No. T2877

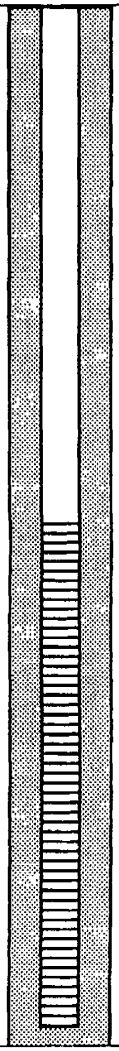
Tax Parcel No. 3803301112490000

Cased or Uncased Diameter 2" Static Level 12'

Work/Decommission Start Date 8/10/07

Work/Decommission Completed Date 8/10/07

If trainee, licensed driller's Signature and License Number:
Anna Harnden 2508

Construction Design	Well Data	Formation Description
	Drove a retractable ~~stainless steel~~ / PVC screen down to depth and collected a water sample. Boring Depth: 27' Screen: 17-20' Slot Size: .010 Type: STAINLESS Removed all rods and casing from boring and backfilled with bentonite.	0-20' SILTY CLAY 20-26' SAND 26-27' HARD CLAY

DEPT. OF ECOLOGY FISCAL & BUDGET '07 SEP 10 AM 8:14

RECEIVED
SEP 12 2007
DEPARTMENT OF ECOLOGY
WELL DRILLING UNIT

SCALE: 1"= ____ PAGE 1 OF ____

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

277025

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. A129918

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☐ Construction

☒ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

E007966

Consulting Firm GeoEngineers

Unique Ecology Well IDTag No. BI

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☐ Driller ☐ Engineer ☒ Trainee

Name (Print Last, First Name) Gogan, Scott

Driller/Engineer /Trainee Signature

Driller or Trainee License No. T2877

If trainee, licensed driller's Signature and License Number: Amar Harinder 2508

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Cascade Laundry & Cleaners

Site Address 205 Prospect Street

City Bellingham County Whatcom

Location NE1/4-1/4 SW1/4 Sec 30 Twn 38N R 03

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

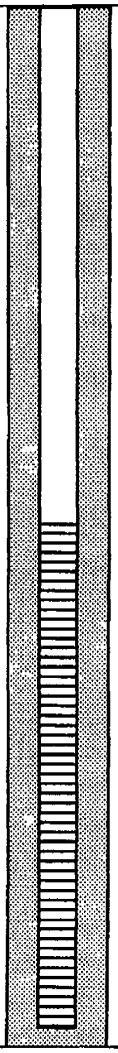
Long Deg ____ Min ____ Sec ____

Tax Parcel No. 3803301112490000

Cased or Uncased Diameter 2" Static Level 12'

Work/Decommission Start Date 8/10/07

Work/Decommission Completed Date 8/10/07

Construction Design	Well Data	Formation Description
	Drove a retractable ~~stainless steel~~ / PVC screen down to depth and collected a water sample. Boring Depth: 27' Screen: 17-20' Slot Size: .010 Type: STAINLESS Removed all rods and casing from boring and backfilled with bentonite.	0-20' SILTY CLAY 20-26' SAND 26-27' HARD CLAY

'07 SEP 10 AM 8:14

DEPT OF ECOLOGY FISCAL & BUDGET

RECEIVED

SEP 12 2007

DEPARTMENT OF ECOLOGY WELL DRILLING UNIT

SCALE: 1"= ____ PAGE 1 OF 1

APPENDIX C

Original Laboratory Analytical Data

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 Bunker-West-5ft
ALS SAMPLE #: -01

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	ND	0.030	1	MG/KG	10/14/2010	DLC
Toluene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Ethylbenzene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Xylenes	EPA-8021	ND	0.20	1	MG/KG	10/14/2010	DLC
TPH-Diesel Range	NWTPH-DX	ND	25	1	MG/KG	10/15/2010	EBS
TPH-Oil Range	NWTPH-DX	ND	50	1	MG/KG	10/15/2010	EBS

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company
www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 Bunker-North-5ft
ALS SAMPLE #: -02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	ND	0.030	1	MG/KG	10/14/2010	DLC
Toluene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Ethylbenzene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Xylenes	EPA-8021	ND	0.20	1	MG/KG	10/14/2010	DLC
TPH-Diesel Range	NWTPH-DX	ND	25	1	MG/KG	10/15/2010	EBS
TPH-Oil Range	NWTPH-DX	**57**	50	1	MG/KG	10/15/2010	EBS
Mercury	EPA-7471	**0.066**	0.020	1	MG/KG	10/19/2010	RAL
Arsenic	EPA-6020	**4.2**	0.75	5	MG/KG	10/19/2010	RAL
Cadmium	EPA-6020	ND	1.3	5	MG/KG	10/19/2010	RAL
Chromium	EPA-6020	**40**	0.74	5	MG/KG	10/19/2010	RAL
Lead	EPA-6020	**24**	0.73	5	MG/KG	10/19/2010	RAL

Chromatogram indicates that it is likely the sample contains lube oil.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 Bunker-Stockpile
ALS SAMPLE #: -03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	ND	0.030	1	MG/KG	10/14/2010	DLC
Toluene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Ethylbenzene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Xylenes	EPA-8021	ND	0.20	1	MG/KG	10/14/2010	DLC
TPH-Diesel Range	NWTPH-DX	ND	25	1	MG/KG	10/15/2010	EBS
TPH-Oil Range	NWTPH-DX	**160**	50	1	MG/KG	10/15/2010	EBS

Chromatogram indicates that it is likely the sample contains lube oil.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 Bunker-Floor-8ft
ALS SAMPLE #: -04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	ND	0.030	1	MG/KG	10/14/2010	DLC
Toluene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Ethylbenzene	EPA-8021	ND	0.050	1	MG/KG	10/14/2010	DLC
Xylenes	EPA-8021	ND	0.20	1	MG/KG	10/14/2010	DLC
TPH-Diesel Range	NWTPH-DX	ND	25	1	MG/KG	10/15/2010	EBS
TPH-Oil Range	NWTPH-DX	ND	50	1	MG/KG	10/15/2010	EBS

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company
www.alsglobal.com

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-South-7ft
ALS SAMPLE #: -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	ND	160	1	UG/KG	10/21/2010	GAP
Chloromethane	EPA-8260	ND	94	1	UG/KG	10/21/2010	GAP
Vinyl Chloride	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Bromomethane	EPA-8260	ND	78	1	UG/KG	10/21/2010	GAP
Chloroethane	EPA-8260	ND	94	1	UG/KG	10/21/2010	GAP
Trichlorofluoromethane	EPA-8260	ND	83	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Methylene chloride	EPA-8260	ND	200	1	UG/KG	10/21/2010	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND	93	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethane	EPA-8260	ND	95	1	UG/KG	10/21/2010	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
2,2-Dichloropropane	EPA-8260	ND	97	1	UG/KG	10/21/2010	GAP
Bromochloromethane	EPA-8260	ND	170	1	UG/KG	10/21/2010	GAP
Chloroform	EPA-8260	ND	97	1	UG/KG	10/21/2010	GAP
1,1,1-Trichloroethane	EPA-8260	ND	87	1	UG/KG	10/21/2010	GAP
1,1-Dichloropropene	EPA-8260	ND	87	1	UG/KG	10/21/2010	GAP
Carbon Tetrachloride	EPA-8260	ND	99	1	UG/KG	10/21/2010	GAP
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dichloropropane	EPA-8260	ND	88	1	UG/KG	10/21/2010	GAP
Dibromomethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Bromodichloromethane	EPA-8260	ND	98	1	UG/KG	10/21/2010	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
1,1,2-Trichloroethane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
1,3-Dichloropropane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Tetrachloroethylene	EPA-8260	**370**	10	1	UG/KG	10/21/2010	GAP
Dibromochloromethane	EPA-8260	ND	150	1	UG/KG	10/21/2010	GAP
1,2-Dibromoethane	EPA-8260	ND	5.0	1	UG/KG	10/21/2010	GAP
Chlorobenzene	EPA-8260	**220**	100	1	UG/KG	10/21/2010	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	81	1	UG/KG	10/21/2010	GAP
Bromoform	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,2,3-Trichloropropane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP

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CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-South-7ft
ALS SAMPLE #: -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Bromobenzene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
2-Chlorotoluene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
4-Chlorotoluene	EPA-8260	ND	160	1	UG/KG	10/21/2010	GAP
1,3 Dichlorobenzene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,4-Dichlorobenzene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
1,2-Dichlorobenzene	EPA-8260	**180**	110	1	UG/KG	10/21/2010	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	96	1	UG/KG	10/21/2010	GAP
Hexachlorobutadiene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-West-7ft
ALS SAMPLE #: -06

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1,000**	30	10	MG/KG	10/15/2010	DLC
Benzene	EPA-8021	ND	0.30	10	MG/KG	10/15/2010	DLC
Toluene	EPA-8021	ND	0.50	10	MG/KG	10/15/2010	DLC
Ethylbenzene	EPA-8021	**2.6**	0.50	10	MG/KG	10/15/2010	DLC
Xylenes	EPA-8021	**13**	2.0	10	MG/KG	10/15/2010	DLC
Dichlorodifluoromethane	EPA-8260	ND	180	1	UG/KG	10/21/2010	GAP
Chloromethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Vinyl Chloride	EPA-8260	**1,200**	10	1	UG/KG	10/21/2010	GAP
Bromomethane	EPA-8260	ND	92	1	UG/KG	10/21/2010	GAP
Chloroethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Trichlorofluoromethane	EPA-8260	ND	97	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Methylene chloride	EPA-8260	ND	230	1	UG/KG	10/21/2010	GAP
Trans-1,2-Dichloroethene	EPA-8260	**890**	110	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Cis-1,2-Dichloroethene	EPA-8260	**8,200**	1,200	10	UG/KG	10/21/2010	GAP
2,2-Dichloropropane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Bromochloromethane	EPA-8260	ND	200	1	UG/KG	10/21/2010	GAP
Chloroform	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,1,1-Trichloroethane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
1,1-Dichloropropene	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Carbon Tetrachloride	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trichloroethene	EPA-8260	**150**	10	1	UG/KG	10/21/2010	GAP
1,2-Dichloropropane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Dibromomethane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
Bromodichloromethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
1,1,2-Trichloroethane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
1,3-Dichloropropane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Tetrachloroethylene	EPA-8260	**98**	10	1	UG/KG	10/21/2010	GAP
Dibromochloromethane	EPA-8260	ND	180	1	UG/KG	10/21/2010	GAP
1,2-Dibromoethane	EPA-8260	**9.9**	5.0	1	UG/KG	10/21/2010	GAP

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DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-West-7ft
ALS SAMPLE #: -06

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	**410**	120	1	UG/KG	10/21/2010	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	95	1	UG/KG	10/21/2010	GAP
Bromoform	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,2,3-Trichloropropane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
Bromobenzene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
2-Chlorotoluene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
4-Chlorotoluene	EPA-8260	ND	180	1	UG/KG	10/21/2010	GAP
1,3 Dichlorobenzene	EPA-8260	**230**	130	1	UG/KG	10/21/2010	GAP
1,4-Dichlorobenzene	EPA-8260	**440**	120	1	UG/KG	10/21/2010	GAP
1,2-Dichlorobenzene	EPA-8260	**2,800**	130	1	UG/KG	10/21/2010	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	150	1	UG/KG	10/21/2010	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Hexachlorobutadiene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP

Chromatogram indicates that it is likely the sample contains mineral spirits.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.

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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-Floor-9ft
ALS SAMPLE #: -07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**820**	30	10	MG/KG	10/16/2010	DLC
Benzene	EPA-8021	ND	0.33	10	MG/KG	10/16/2010	DLC
Toluene	EPA-8021	ND	0.55	10	MG/KG	10/16/2010	DLC
Ethylbenzene	EPA-8021	**2.2**	0.55	10	MG/KG	10/16/2010	DLC
Xylenes	EPA-8021	**12**	2.2	10	MG/KG	10/16/2010	DLC
Dichlorodifluoromethane	EPA-8260	ND	200	1	UG/KG	10/21/2010	GAP
Chloromethane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Vinyl Chloride	EPA-8260	**1,200**	10	1	UG/KG	10/21/2010	GAP
Bromomethane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Chloroethane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Trichlorofluoromethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Methylene chloride	EPA-8260	ND	250	1	UG/KG	10/21/2010	GAP
Trans-1,2-Dichloroethene	EPA-8260	**840**	120	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Cis-1,2-Dichloroethene	EPA-8260	**1,800**	130	1	UG/KG	10/21/2010	GAP
2,2-Dichloropropane	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Bromochloromethane	EPA-8260	ND	210	1	UG/KG	10/21/2010	GAP
Chloroform	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
1,1,1-Trichloroethane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
1,1-Dichloropropene	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Carbon Tetrachloride	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trichloroethene	EPA-8260	**650**	10	1	UG/KG	10/21/2010	GAP
1,2-Dichloropropane	EPA-8260	ND	110	1	UG/KG	10/21/2010	GAP
Dibromomethane	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
Bromodichloromethane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,1,2-Trichloroethane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
1,3-Dichloropropane	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP
Tetrachloroethylene	EPA-8260	**91**	10	1	UG/KG	10/21/2010	GAP
Dibromochloromethane	EPA-8260	ND	190	1	UG/KG	10/21/2010	GAP
1,2-Dibromoethane	EPA-8260	ND	5.0	1	UG/KG	10/21/2010	GAP

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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-Floor-9ft
ALS SAMPLE #: -07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	**500**	130	1	UG/KG	10/21/2010	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	100	1	UG/KG	10/21/2010	GAP
Bromoform	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
1,2,3-Trichloropropane	EPA-8260	ND	150	1	UG/KG	10/21/2010	GAP
Bromobenzene	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
2-Chlorotoluene	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
4-Chlorotoluene	EPA-8260	ND	200	1	UG/KG	10/21/2010	GAP
1,3 Dichlorobenzene	EPA-8260	ND	140	1	UG/KG	10/21/2010	GAP
1,4-Dichlorobenzene	EPA-8260	**210**	130	1	UG/KG	10/21/2010	GAP
1,2-Dichlorobenzene	EPA-8260	**1,000**	140	1	UG/KG	10/21/2010	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	170	1	UG/KG	10/21/2010	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	120	1	UG/KG	10/21/2010	GAP
Hexachlorobutadiene	EPA-8260	ND	150	1	UG/KG	10/21/2010	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	130	1	UG/KG	10/21/2010	GAP

* Chromatogram indicates that is likely that sample contains mineral spirits. TPH- Benzene, Toluene reporting limit raised due to low percent solids.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.

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CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-Stockpile
ALS SAMPLE #: -08

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Chloromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Vinyl Chloride	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Bromomethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Chloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trichlorofluoromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Methylene chloride	EPA-8260	ND	20	1	UG/KG	10/21/2010	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1-Dichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
2,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Bromochloromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Chloroform	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1,1-Trichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1-Dichloropropene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Carbon Tetrachloride	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trichloroethene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Dibromomethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Bromodichloromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1,2-Trichloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,3-Dichloropropane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Tetrachloroethylene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Dibromochloromethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dibromoethane	EPA-8260	ND	5.0	1	UG/KG	10/21/2010	GAP
Chlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Bromoform	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2,3-Trichloropropane	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP

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CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry
CLIENT SAMPLE ID: 10/13/2010 PERC-Stockpile
ALS SAMPLE #: -08

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Bromobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
2-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
4-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,3 Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,4-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	50	1	UG/KG	10/21/2010	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
Hexachlorobutadiene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	10/21/2010	GAP

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St.
Suite 101
Bellingham, WA 98225

DATE: 10/26/2010
ALS JOB#: 1010096
DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

ALS SAMPLE ID	METHOD	SUR ID	% RECV
1010096-01	EPA-8021	TFT	95%
1010096-01	NWTPH-DX	C25	89%
1010096-02	EPA-8021	TFT	85%
1010096-02	NWTPH-DX	C25	95%
1010096-03	EPA-8021	TFT	92%
1010096-03	NWTPH-DX	C25	99%
1010096-04	EPA-8021	TFT	81%
1010096-04	NWTPH-DX	C25	91%
1010096-05	EPA-8260	1,2-Dichloroethane-d4	100%
1010096-05	EPA-8260	4-Bromofluorobenzene	107%
1010096-06 10X Dilution	NWTPH-GX	TFT	S2
1010096-06 10X Dilution	EPA-8021	TFT	S2
1010096-06	EPA-8260	1,2-Dichloroethane-d4	104%
1010096-06	EPA-8260	4-Bromofluorobenzene	98%
1010096-06 10X Dilution	EPA-8260	1,2-Dichloroethane-d4	100%
1010096-06 10X Dilution	EPA-8260	4-Bromofluorobenzene	92%
1010096-07 10X Dilution	NWTPH-GX	TFT	S2
1010096-07 10X Dilution	EPA-8021	TFT	S2
1010096-07	EPA-8260	1,2-Dichloroethane-d4	103%
1010096-07	EPA-8260	4-Bromofluorobenzene	S1
1010096-08	EPA-8260	1,2-Dichloroethane-d4	109%
1010096-08	EPA-8260	4-Bromofluorobenzene	102%

S1- Surrogate outside of control limits due to matrix effect.
S2- Due to high dilution factor surrogate results should be considered uncontrolled.

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CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MBG-101310S	Soil	NWTPH-GX	TPH-Volatile Range	ND(<3.0)	MG/KG
MB-101310S	Soil	EPA-8021	Benzene	ND(<0.030)	MG/KG
MB-101310S	Soil	EPA-8021	Toluene	ND(<0.050)	MG/KG
MB-101310S	Soil	EPA-8021	Ethylbenzene	ND(<0.050)	MG/KG
MB-101310S	Soil	EPA-8021	Xylenes	ND(<0.20)	MG/KG
MB-101510S	Soil	NWTPH-DX	TPH-Diesel Range	ND(<25)	MG/KG
MB-101510S	Soil	NWTPH-DX	TPH-Oil Range	ND(<50)	MG/KG
MB-101610S	Soil	EPA-8260	Dichlorodifluoromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Chloromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Vinyl Chloride	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Bromomethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Chloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Trichlorofluoromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Carbon Tetrachloride	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1-Dichloroethene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Methylene chloride	ND(<20)	UG/KG
MB-101610S	Soil	EPA-8260	Trans-1,2-Dichloroethene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1-Dichloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Cis-1,2-Dichloroethene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	2,2-Dichloropropane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Bromochloromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Chloroform	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1,1-Trichloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1-Dichloropropene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2-Dichloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Trichloroethene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2-Dichloropropane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Dibromomethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Bromodichloromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Trans-1,3-Dichloropropene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Toluene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Cis-1,3-Dichloropropene	ND(<10)	UG/KG

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DATE: 10/26/2010
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DATE RECEIVED: 10/14/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MB-101610S	Soil	EPA-8260	1,1,2-Trichloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,3-Dichloropropane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Tetrachloroethylene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Dibromochloromethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2-Dibromoethane	ND(<5.0)	UG/KG
MB-101610S	Soil	EPA-8260	Chlorobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1,1,2-Tetrachloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Bromoform	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,1,2,2-Tetrachloroethane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2,3-Trichloropropane	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Bromobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	2-Chlorotoluene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	4-Chlorotoluene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,3 Dichlorobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,4-Dichlorobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2-Dichlorobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2-Dibromo 3-Chloropropane	ND(<50)	UG/KG
MB-101610S	Soil	EPA-8260	1,2,4-Trichlorobenzene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	Hexachlorobutadiene	ND(<10)	UG/KG
MB-101610S	Soil	EPA-8260	1,2,3-Trichlorobenzene	ND(<10)	UG/KG
MBLK-10192010	Soil	EPA-7471	Mercury	ND(<0.020)	MG/KG
MB-101810S	Soil	EPA-6020	Arsenic	ND(<0.12)	MG/KG
MB-101810S	Soil	EPA-6020	Cadmium	ND(<0.20)	MG/KG
MB-101810S	Soil	EPA-6020	Chromium	ND(<0.12)	MG/KG
MB-101810S	Soil	EPA-6020	Lead	ND(<0.12)	MG/KG

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
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DATE: 10/26/2010
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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Thom Davis
CLIENT PROJECT ID: Cascade Laundry

QUALITY CONTROL RESULTS

BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

QC BATCH ID	MATRIX	METHOD	ANALYTE	SPIKE AMOUNT	BLANK SPIKE RECOVERY	BLANK SPIKE DUPLICATE RECOVERY	RPD
1153	Soil	NWTPH-GX	TPH-Volatile Range	500	101%	102%	0
1153	Soil	EPA-8021	Benzene	20	106%	107%	0
1153	Soil	EPA-8021	Toluene	20	106%	106%	0
1153	Soil	EPA-8021	Ethylbenzene	20	103%	103%	0
1153	Soil	EPA-8021	Xylenes	60	107%	107%	0
1150	Soil	NWTPH-DX	TPH-Diesel Range	250	84%	84%	0
1166	Soil	EPA-8260	1,1-Dichloroethene	10	86%	89%	3
1166	Soil	EPA-8260	Trichloroethene	10	94%	96%	2
1166	Soil	EPA-8260	Toluene	10	88%	92%	4
1166	Soil	EPA-8260	Chlorobenzene	10	91%	94%	3
R71174	Soil	EPA-7471	Mercury	100	109%	101%	8
1170	Soil	EPA-6020	Arsenic	100	92%	93%	1
1170	Soil	EPA-6020	Cadmium	100	96%	95%	0
1170	Soil	EPA-6020	Chromium	100	95%	94%	1
1170	Soil	EPA-6020	Lead	100	98%	97%	1

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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1010096

Date 10/13/10 Page 1 Of 1

PROJECT ID: Cascade Laundry
REPORT TO COMPANY: Whatcom Env. Svcs.
PROJECT MANAGER: Thom - Harold
ADDRESS: 228 E. Champion #101
Bham, WA 98225
PHONE: 752-9571 FAX: 752-9573
P.O. NUMBER: E-MAIL:
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

LABORATORY COPY

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☒ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. Bunker-West-5ft	10/13/10	830	Soil	1		X		X													2	
2. Bunker-North-5ft		840		2		X		X									X				2	
3. Bunker-Stockpile		850		3		X		X													2	
4. Bunker-Floor-8ft		1230		4		X		X													2	
5. PERC-South-7ft		910		5						X											4	
6. PERC-West-7ft		930		6			X	X		X											4	
7. PERC-Floor-9ft		920		7			X	X		X											4	
8. PERC-Stockpile		1000		8						X											4	
9.																						
10.																						

SPECIAL INSTRUCTIONS: Collected via 5035A

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: WES 10/13/10 @ 1315
Received By:
2. Relinquished By:
Received By: Shawn Roberson ALS 10/14/10 2:40

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY
Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY
OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

Stratum Group
1451 Grant Street, Bellingham, WA 98225
Phone: (360) 714-9409

May 2, 2006

Bob Goodwin
249 Dolphin Place
Bellingham, Washington 98229

Environmental Site Assessments: Phase I and Phase II
Cascade Laundry
205 Prospect Street
Bellingham, Washington

Dear Mr. Goodwin:

We herein present the results of our Phase I and Phase II Environmental Site Assessments (ESA) for the above referenced property in Bellingham, Washington.

Should you have any questions concerning this Environmental Site Assessment, please do not hesitate to contact us at (360) 714-9409.

Sincerely,

Stratum Group

Dan McShane, M.S.
Geologist

Kim Ninnemann, B.S.
Geologist

REPORT
ENVIRONMENTAL SITE ASSESSMENT
PHASE I AND PHASE II

CASCADE LAUNDRY
205 PROSPECT STREET
BELLINGHAM, WASHINGTON

For:
Bob Goodwin
249 Dolphin Place
Bellingham, Washington 98229

By

Stratum Group
1451 Grant Street
Bellingham, WA 98225
(360) 714-9409

May 2, 2006

TABLE OF CONTENTS

SECTION 1: EXECUTIVE SUMMARY

At the request of Bob Goodwin, Stratum Group conducted Phase I Environmental Site Assessment at 205 Prospect Street in Bellingham, Washington in April 2006.

The site is currently utilized by Cascade Laundry, a commercial laundry cleaning and delivery business. Our historical review indicated that the building was constructed on the subject property in 1922 and has been utilized by Cascade Laundry since at least 1932. An addition was added to the south side of the building in the 1966. Cascade Laundry has utilized the building for laundry, dry cleaning, and fabric dyeing services. The dry cleaning and fabric dyeing operations were ended by approximately 1971. Based on the former uses of the subject property, particularly the dry cleaning and fabric dying operations, a Phase II soil sampling investigation was recommended.

During the test pit investigation, three underground storage tanks were encountered on the property. One underground storage tank was discovered south of the southwestern end of the building during the test pit excavation. This tank is approximately 300-gallons in size and was likely used in the dry cleaning or fabric dyeing operation. A second underground storage tank is located north of the west side of the building. The size of this tank is unknown, but was used to contain fuel for a boiler. Neither of the two tanks is currently in use. A third tank previously contained leaded gasoline and was closed-in-place west of the northwest corner of the building. The Washington State Department of Ecology Underground Storage Tank data base indicates that two other tanks had previously been removed from the property. However, other than the reported tank removal, no other information regarding the two removed tanks was available.

Five test pits were excavated around the western perimeter of the building and eight soil samples were collected. The samples were analyzed for diesel, oil, and volatile organic compounds. Volatile organic compounds were detected in six of the samples analyzed. Clean up levels have been established for only one of the four volatile organic compounds detected in the samples, tetrachloroethylene. Tetrachloroethylene (also known as PERC) is a commonly used as a dry cleaning solvent. Two of the samples have detections of PERC significantly above the clean up standard. Four samples contained detections for oil-range hydrocarbons, but the levels were well below the Method A clean up standard.

Due to the presence of two underground storage tanks that are no longer in use and soil samples with levels of volatile organic compounds above the clean up standard, we recommend that a tank removal and soil clean up be completed. Recommendations for the clean up of the subject property are detailed in the *Conclusions* of this report.

SECTION 2: INTRODUCTION

2.1 Purpose and Scope

The purpose of the Phase I Environmental Site Assessment was to identify, to the extent feasible pursuant to the processes prescribed within the ASTM Standard Practice E 1527, recognized environmental conditions in connection with the subject property. A recognized environmental condition is defined as the presence or likely presence of any hazardous substances or petroleum

products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property, even under conditions in compliance with existing laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The scope of our services included:

- Inspection of the property for indications of hazardous substances, petroleum products, lead paint, asbestos, or careless storage or disposal practices that could potentially lead to contamination
- Review of Federal, State, and local records as to locations of nearby hazardous waste sites or leaking underground storage tanks
- Review of other public records, historic aerial photographs, and historic maps to determine past usage of the property and surrounding areas
- Interview of persons with knowledge of the sites and surrounding property
- Review of the physical setting, geology and geohydrology of the site
- Review reports completed for the subject property or adjacent sites
- Complete five test pits and collect soil samples to evaluate if contamination is present
- Transport samples to an accredited laboratory using proper storage and handling practices
- Evaluate laboratory analysis reports
- Preparation of this report describing the conditions encountered and recommendations for further study, if necessary.

2.2 Special Terms and Conditions

Stratum Group has prepared this report using reasonable efforts in each phase of its work to estimate the liabilities associated with recognized environmental conditions on the subject property and in the vicinity of the subject property. No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. This report is intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions in connection with the subject property, in recognition of reasonable limits of time and cost. Stratum Group makes no warranty, expressed or implied, as to the accuracy of information contained in public records.

This report is not definitive and should not be assumed to be a complete or specific definition of all conditions above or below grade.

2.3 Limiting Conditions and Methodology Used

No limiting conditions were encountered during the conduct of this Phase I Environmental Site Assessment. The methodology used during the production of this report is as prescribed in the ASTM E 1527 standard.

SECTION 3: SITE CHARACTERIZATION

3.1 Location

The subject property is located in the downtown area of Bellingham, Washington at 205 Prospect Street. The property is located in the northwest quarter of the southwest quarter Section 30, Township 33 North, Range 3 West of Willamette Meridian. The location of the subject property is indicated in Figure 1 in the Appendix I.

3.2 Site and Vicinity Physical Characteristics

The subject property is approximately 0.54 acres in size and is located within the downtown Bellingham commercial area. The property is occupied by one building that is currently utilized by Cascade Laundry. The subject property is located at an elevation of approximately 60 feet above mean sea level and is located adjacent to an approximately 35-foot high vegetated slope. The slope extends along the western property boundary and slopes westward. Whatcom Waterway is located approximately 550 feet west of the subject property.

3.2.1 Geologic Summary

Northwestern Washington has been occupied by continental glaciers at least four times during the Pleistocene Epoch (1.6 million to 10,000 years ago). During these glacial (stades) and accompanying interglacial periods (interstades), the underlying bedrock was eroded and glacial related sediments of varying thickness were deposited over the bedrock.

The following descriptions of the surficial deposits in the vicinity of the subject property were interpreted from the Geologic Map of Western Whatcom County, Washington (Easterbrook, 1976), the Preliminary Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington (Lapin and others, 2000) and our own observations in the vicinity of the subject property. According to Easterbrook (1976) and Lapin and others (2000), the subject property is underlain by Bellingham glaciomarine drift. The Bellingham Drift was deposited by melting glacial ice near the end of the last glacial period when the area was submerged below sea level. The Bellingham Drift generally consists of silty clay. Glaciomarine drift soils were not observed during our test pit investigation. The soils observed on the subject property to a depth of approximately 8 feet were brown sandy, silty fill material. Some bricks, pipes, and other miscellaneous debris were observed in the pits.

Chuckanut sandstone was observed at approximately 5 foot depth in test pit #3.

The Soil Survey of Whatcom County (USDA, 1992), describes the soils on and in the vicinity of the subject property as urban land. Due to the presence of buildings no soil data was available.

3.2.2 Geohydrologic Summary

Generally, shallow ground water flow direction is a function of topography. The subject property is located along the east side of a west facing slope. Ground water information provided in the *Environmental Site Assessment, Northwest Center for Art, Maritime Heritage Park Site, Bellingham, Washington* completed by Landau Associates in February 1993 for the adjacent site to the west indicates that the ground water flow is northwest toward Whatcom Creek and Bellingham Bay. The report indicates that ground water elevation is approximately 12-13 feet above mean sea level or approximately 43 feet below the subject property.

3.3 Site Description

Stratum Group conducted a site visit to the subject property on April 1, 2006. A second site visit and Phase II sampling was conducted on April 6, 2006.

The property is occupied by one large building that is used as laundry facility for Cascade Laundry.

A 2002 aerial photograph of the subject property and vicinity is presented in Figure 2. The aerial photograph provides a good overview and layout of the property. A general site plan sketch is provided in Figure 3 in the Appendix I. The test pit locations are also indicated in Figure 3. Photographs of the site are provided in Figures 4 through 8 in the Appendix I.

3.3.1 Public Utilities

The property is serviced by electricity, natural gas, and telephone utilities and utilizes the public water and sanitary sewer systems.

3.3.2 Building Conditions

One building is located on the subject property. The building is two stories high and has a daylight basement.

The eastern portion of the property, nearest to Prospect Street is utilized as a small office. The main floor of the building has numerous large laundry washing and drying equipment, garment pressing equipment, and various other large metal laundry equipment. Large floor drains are located beneath

the washing equipment. The drains are connected to the sanitary sewer system. Biodegradable soaps are currently used in the machines. The former dry cleaning area was located in the southwest corner of the building. The main floor has concrete floors. An addition was added to the south side of the building in the 1960s and is utilized for storage of dirty clothes that are ready for cleaning. The southwest corner of the main floor of the building was the area previously utilized for dry cleaning.

Approximately three painted areas were tested for lead paint and no lead was detected. A few pipes were wrapped with fiberglass insulation and no asbestos containing materials were noted.

The second story of the building is primarily utilized as storage. Large wooden beams and wooden floor are present in the second story. A rug cleaning area is located in the western portion of the second story. A small former apartment is located in the east end of the second story. A small bathroom is located in the southwest corner of the second story. No lead paint was detected in the painted areas of the former apartment. Access to the roof of the southern building addition is available through the second story. The owner of the property, Terry O'Hara, stated that the roof was replaced approximately 5 years ago. A pile of the previous roofing material is located on the second floor of the building and may contain asbestos.

The basement of the building is utilized as a maintenance area and contains the current and former boiler. The current boiler is powered by natural gas. A large water tank is also located in the basement. Small containers (5-gallons or less) of oils and various materials were stored in the basement of the building. Low areas are present in the floor of the basement for access to the former partially underground boiler. A floor drain was observed in the floor of the basement. The maintenance man for Cascade Laundry indicated that the former boiler had previously been wrapped with asbestos containing materials and an extensive asbestos removal had taken place. Doors from the basement lead to the access road along the west side of the building.

Our interior observations as required by ASTM Standard Practice E 1527, are presented in Table 1.

TABLE 1
Interior Observations Checklist

ASTM Observation	***Yes/No***	**Comments**
Heating	Yes	The building is heated by natural gas.
Stains/Corrosion	No	
Drains/Sumps	Yes	Drains are present beneath the washing machines on the main floor of the building and in the basement. The drains are currently connected to the sanitary sewer.
Asbestos	Potential	No asbestos materials were observed, except for a pile of previous roofing materials that is stored in the second story of the building that may contain asbestos.
Lead Paint	No	Lead testing was completed in a few locations inside the building and no lead paint was detected.
PCBs	No	
Hazardous Containers	Yes	A few 5-gallon buckets of oil were present in the basement of the building.
Odors	No	

3.3.3 Surface Conditions

A site sketch of the subject property is presented in Figure 3 and an aerial photograph of the site is presented in Figure 2 in Appendix I. The site sketch and aerial photograph provide a good overview of the layout of the subject property.

A paved access road extends along the western boundary of the subject property and wraps around the southern portion of the property to beneath a covered area south of the building addition. The covered area is utilized for storage of laundry bins and for loading/unloading the delivery trucks. The covered area is also accessible through the paved parking area in the southwest corner of the subject property, adjacent to Prospect Street.

The land between the paved access road and the building is primarily dirt covered, except for some additional paved parking along the north side of the building. Retaining walls are located along the southwest and northwest sides of the building are 7-9 feet high. The retaining walls are such that an elevated terrace is located on the uphill side of the retaining wall.

The owner of the property and the maintenance man indicated that an underground storage tank (UST) is located along the northwest side of the building within fill material contained by the retaining wall. The tank is thought to have held fuel for the former boiler. A second UST was discovered in the fill material along the southwest side of the building during our test pit excavation. Details about the test pit excavation and soil sampling is presented in the *Section 5 – Potential On-Site Contamination Sources* section of this report

Our A pril 1, 2006 e xterior obs ervations a s r equired by A STM S tandard P ractice E 1527 are presented in Table 2.

TABLE 2
Exterior Observations Checklist

ASTM Observation	***Yes/No***	**Comments**
Hazardous Containers	No	
Storage Tanks	Yes	An approximately 300-gallon tank that may be associated with the site's former use as a dry cleaner/fabric dying facility is located along the southwest wall of the building. One UST exists along the northwest side of the building and was used to contain fuel for the former boiler. One tank was closed-in-place west of the northwest corner of the building. Two other tanks have been reported to have been removed from the property, but no other information was available regarding the use or location of the tanks.
Solid Waste Disposal	No	
Odors	Yes	A sharp sweet odor was observed in the soils south of the southwest corner of the building during our test pit excavations.
PCBs	No	
Asbestos	No	
Pits, Ponds, Lagoons	No	
Stained Soil	No	
Stressed Vegetation	No	
Waste Water	No	
Septic Systems	No	The property is connected to the City of Bellingham sanitary sewer.

3.3.4 Adjoining Properties

Central Avenue, a paved parking area, and a building utilized by a variety of offices bound the subject property to the north. The building, located at 209 Prospect Street, shares a common wall with the subject property. Prospect Street bounds the subject property to the east. A small building utilized by Accurate Lock (200 Prospect Street) and a larger building utilized as part of the

Whatcom County Museum (206 Prospect Street) are located across Prospect Street from the subject property. A building utilized by the Whatcom County Museum bounds the subject property to the south. A vegetated slope and Maritime Heritage Park bound the subject property to the west. A portion of Maritime Heritage Park was utilized as a part of a municipal landfill in the 1940s and 1950s. Information about this site is presented in the *Section 3.4 - Site Documents* of this report.

3.4 Site Documents

A document entitled *Environmental Site Assessment, Northwest Center for Art, Maritime Heritage Center Park Site, Bellingham, Washington* completed in February 1993 by Landau Associates was reviewed for this report. The report includes a history of the Maritime Heritage Park site and vicinity and the results of soil, ground water, and methane testing. Four test pits and four borings were completed on the Maritime Heritage Park site in November 1992 of which three of the borings became ground water monitoring wells. The report indicates that refuse mixed with 10-40% soil was found between 2-4 feet below the ground surface (bgs). The refuse was between 12-20 feet thick and consisted of glass bottles, metal scrap, paper, porcelain, soil, cloth, wire, cans, brick, tires, wood chips, and appliance and automotive parts. Bedrock was reached between 25-36 feet bgs. Landau indicates that ground water was encountered between 19-24 feet bgs or at an elevation of 12-13 feet elevation above mean sea level. Ground water flow was determined to be to the northwest toward Bellingham Bay and Whatcom Creek based on information gathered from the monitoring wells. Methane gas was detected at 22-35% of the lower explosive limit inside two of the monitoring wells.

The ground water quality tests indicated none of the 36 volatile organic compounds analyzed for were detected in the samples. Total petroleum hydrocarbon contamination was not found above the detection limit. Calcium, iron, manganese, and zinc were detected in the ground water samples. The maximum contaminate levels for iron and manganese was exceeded in the ground water. Lead, arsenic, chromium, and mercury were not found above the detection limits.

The soil tests taken in the refuse areas found detections of arsenic, cadmium, chromium, lead, mercury, and zinc. Of the detected metals, only zinc was determined to exceed the clean up levels in the refuse soil samples. Zinc was not found in the ground water.

The report mentions in the conclusion that Cascade Laundry discharges water on the bluff. The report recommends that the discharge (mostly water) from the Cascade Laundry site be redirected into the storm sewer or sanitary sewer system.

Based on the location of the former landfill site down gradient of the subject property it is our opinion that the Maritime Heritage Park site does not negatively impact the environmental conditions on the subject property. The results also indicate that ground water at the Maritime Heritage Park has not been impacted by solvents associated with dry cleaning operations.

3.5 Interviews

Whatcom County Health Department was contacted concerning any known environmental health hazards associated with the property. The Health Department indicated that they had no records or reports of environmental conditions associated with the property.

Terry O'hara, owner of the subject property, indicated that the property was utilized as a dry cleaner approximately 35-40 years ago. The dry cleaning equipment was located in the southwest corner of the main building. Mr. O'hara thought that the dry cleaning operation was ended by at least 1971. Mr. O'hara stated that the office portion of the building was created in the 1980s and that the roof of the entire building was replaced in approximately 2001.

Bill Reilly with the City of Bellingham Public Works was interviewed on March 28, 2006. Mr. Reilly stated that the Cascade Laundry site had previously had problems with a drain line that was releasing steamy discharge onto the slopes west of the building. Mr. Reilly stated that the issue had been resolved with the sewer department and the site was connected to the sanitary sewer.

The City of Bellingham fire department was interviewed on May 2, 2006. The fire department records indicate that one tank was filled-in-place on the subject property in September 1991.

3.6 Past Use of Site and Adjoining Properties

Our historic investigation included review of historical Sanborn Fire Insurance Maps, Polk City Directories, Whatcom County Assessor's notes, historic photographs of the area and interviews with the owner of the subject property.

3.6.1 Summary of Past Site Use

The subject property and vicinity was initially developed in approximately the 1850s as it is located near the earliest area of development along Bellingham Bay. An 1892 photograph of the site indicates that a small home was located on the subject property at that time. The Sanborn Maps indicate that a residence was constructed in the southwest corner of the subject property by 1904. The main structure of the building presently on the subject property was constructed in 1922. The southern portion of the subject property was utilized as a car sales lot until approximately 1935. Cascade Laundry began to utilize the subject property by at least 1932. An addition was added to the south side of the building in the 1966. Cascade Laundry has utilized the building for cleaning clothing, rugs, and miscellaneous goods, dry cleaning, and dyeing fabric. The year that the dry cleaning operation began is unknown but is believed to have ended by 1971.

3.6.2 Summary of Past Site Use of Adjoining Properties

The land north of the subject property was utilized as a home site from the late 1800s. By 1913, a building utilized as a tenement was located near the northwest corner of the subject property. This building was removed in the 1920s a building was constructed that shared a wall with the northeast wall of the building on the subject property. The building was utilized by the Salvation Army from at least 1935 through the 1970s. Since approximately 1980, the building has been utilized by numerous offices and commercial businesses.

Prospect Street has historically bound the subject property to the east. A grocery warehouse was located across Prospect Street from the subject property as early as 1897. A grain and hay warehouse was located across Prospect Street from the subject property in 1904. By 1913, a large building was constructed across Prospect Street from the subject property (206 Prospect Street). The building has since been utilized as a garage, warehouse, auto repair shop, and museum. The 1932 and 1963 Sanborn Fire Insurance Maps indicate that an underground gasoline tank was located in the road west of the building at 206 Prospect Street. By 1932 a gasoline station was constructed on the corner of Prospect and Flora Street (200 Prospect Street), across Prospect Street from the subject property. The gasoline station operated until the late 1970s. The site has been utilized by Accurate Lock since approximately 1980.

Vacant land bounded the subject property to the south in the late 1800s and early 1900s. By 1913, a building was constructed south of the subject property and was utilized by the fire department. The building was remodeled in the early 1990s and is currently utilized as a museum.

The land west of the subject property was initially utilized as a saw mill lumber yard in the mid to late 1800s. The land was utilized as part of a municipal landfill in the 1940s and 1950s. The landfill was later capped with 2-4 feet of clean soil. The property was developed as a park in the early 1990s.

3.6.3 Historic Use Sources

Historic aerial photographs and maps of the subject properties were consulted for this Phase I ESA to determine past uses of the subject property and adjacent properties and are listed below.

1. Sanborn Fire Insurance Maps dated 1897, 1904, 1913, 1932, 1948, and 1963, maintained by the City of Bellingham Public Library in Bellingham, Washington and the on-line digital Sanborn Fire Insurance Map database.
2. Polk City Directories for Bellingham dated 1935-1985, maintained by the City of Bellingham Public Library in Bellingham, Washington. The directories were

inspected at approximately 5-year intervals.

3. Property assessor records maintained by the Whatcom County Assessors Office, Bellingham, Washington
4. Information available through interviews with the owner of the subject property.
5. Review of the report entitled *Environmental Site Assessment, Northwest Center for Art, Maritime Heritage Center Park Site, Bellingham, Washington* completed in February 1993 by Landau Associates for an adjacent property to the west.
6. Bellingham North, Washington, Revised 1989, 7.5-Minute Series (Topographic): United States Geologic Survey, scale 1:24,000. Part of this map is reproduced in Figure 1.
7. Available historic photographs we have in our collection dating back to the late 1800s.

SECTION 4: POTENTIAL OFF-SITE CONTAMINATION SOURCES

4.1 Standard ASTM Environmental Record Sources

The public documents, listed in Table 3, have been reviewed to identify off-site contamination sources in the vicinity of the subject property that have a potential to negatively impact the subject property's soil, ground water, or surface water. The sites found within the search radius, as identified by the ASTM standard, are then evaluated to determine their potential effect on the subject property. Factors such as location, topographic barriers, ground water flow direction, type of contamination, and the actions taken to remove the contamination are all considered to determine each off-site contamination source's potential impacts on the subject property.

Thirty-eight potential off-site contamination sources were identified within the ASTM standard search radius. The subject property is also listed on the public databases as an Underground Storage Tank site. The locations of the potential contamination sources and the subject property are indicated on the Figure 1 site vicinity map. The sites are numbered on the Figure 1 site vicinity map and correspond to the site names listed on the *Potential Off-Site Contamination Sources* list on the page following the map.

TABLE 3
Environmental Records Review

AGENCY	DOCUMENT	SEARCH RADIUS	IDENTIFIED SITES
Federal Environmental Protection Agency	Resource Conservation and Recovery Act Transfer, Storage, and/or Disposal Facility (RCRA TSD)	1 Mile	0
	CERCLIS	½ Mile	0
	National Priorities List (SUPERFUND)	1 Mile	0
Washington State Department of Ecology	Confirmed and Suspected Contaminated Sites (CSCS)	1 Mile	18
	Leaking Underground Storage Tank List (LUST)	½ Mile	16
	Underground Storage Tank List (UST)	Adjacent*	4
Whatcom County Health Department	Solid Waste Landfill Sites	1 Mile	1

*Subject property is listed as an Underground Storage Tank Site with Ecology

4.2 Potential Off-Site Sources

Thirty-eight sites were identified within the ASTM search radius around the subject property.

Many of the sites are located across Whatcom Creek from the subject property, which acts as a hydrologic barrier. Based on the hydrologic separation of the sites from the subject property, it is our opinion that all of the sites located north of Whatcom Creek from the subject property do not pose a significant risk of contamination to the subject property.

The topography in the vicinity of the Old Sears Building (map #32) and the Cornwall Building (map #16) indicates that shallow ground water flows north toward Whatcom Creek and away from the subject property. Based on the ground water flow direction from these sites away from the subject property, it is our opinion that these sites do not pose a significant risk of contamination to the subject property.

The Colony Wharf (map #4), Holly Street Landfill (map #6), Rentals Inc (map #24), and Whatcom Waterway (map #9) sites are located down gradient of the subject property and therefore do not pose a significant risk of contamination to the subject property.

The topography in the vicinity of the Georgia-Pacific (map #1), Bellingham National Bank (map #2), Morse Hardware Company (map #10), Ray's Station (map #11), Burlington Northern (map #17) sites slopes toward the northwest. Shallow ground water flow generally follows the local topography, which indicates that shallow ground water flow is to the northwest toward Bellingham Bay and away from the subject property. Based on the locations of these sites, it is our opinion that they do not pose a significant risk of contamination to the subject property.

The Minit-Lube site (map #25), the Lighthouse Mission Warehouse (site #12), and Motorpool (map #30) are listed with Ecology as having been reportedly cleaned up. Based on the sites having been reportedly cleaned up, it is our opinion that these sites do not pose a significant risk of contamination to the subject property.

The Smart Stop Shell (map #7) is listed with Ecology as having impacted the soil and ground water with petroleum products. Ecology's database indicates that a clean up was started at the site in June 1995. The site is located approximately 2,150 feet southeast of the subject property. Based on the distance separating the subject property from the Smart Stop Shell site, it is our opinion that the site does not pose a significant risk of contamination to the subject property.

Three sites are located adjacent to the subject property: the Fire Station (map #39), the Accurate Lock site (map #37), and the gas tank beneath Prospect Street (map #36). The Fire Station site is located adjacent to the south side of the subject property. Ecology's database indicates that one UST has been removed from the site. The site is not listed as a contaminated site and is located laterally gradient to the subject property. It is our opinion that the Fire Station site does not pose a significant risk of contamination to the subject property.

The Accurate Lock and the gas tank beneath Prospect Street sites are located adjacent to the east side of the subject property. The sites are not listed on the public databases, but were identified through our historical records search. The status of the tanks (whether they are present or not) is unknown. No odors or sheen indicative of gasoline were observed in the soils during our test pits in the western portion of the subject property. In addition, the soils in the vicinity consist of glaciomarine drift, which has a high clay content and slows the movement of gasoline through the subsurface. It is our opinion that the Accurate Lock and the gas tank beneath Prospect Street pose a low risk of contamination to the subject property and no further investigation is warranted.

SECTION 5: POTENTIAL ON-SITE CONTAMINATION SOURCES

5.1 Potential On-Site Sources

A representative of Stratum Group visited the subject property on April 1, 2006. The purpose of the site visit was to identify, to the extent feasible pursuant to the processes prescribed within the ASTM Standard Practice E 1527, recognized environmental conditions in connection with the subject property.

Our site inspection and interviews with people knowledgeable about the site indicated that at least five USTs have been located on the subject property. One leaded gasoline tank was closed-in-place on the site in September 1991. One tank is located north of the northwest portion of the building and was previously used to hold fuel for a boiler. A third tank was discovered in the fill material south of the southwest corner of the building and was likely utilized in the dry cleaning or fabric dyeing operations at the site. Ecology's UST database indicates that two other tanks were removed from the subject property, but no information is known about these tanks.

In addition, our historical review and interviews with people knowledgeable about the site indicated that the property previously had dry cleaning and fabric dyeing operations. The solvents and chemicals associated with these uses can be hazardous to human health and the environment. Therefore, based on the presence of tanks and the previous uses of the subject property, a Phase II soil sampling investigation was recommended.

5.2 Phase II Soil Sampling Investigation

A Phase II investigation was completed on April 6, 2006. Five test pits were excavated around the west end of the building on the subject property. One to two soil samples were collected from each test pit and analyzed for volatile organic compounds, diesel, and oil. A map of the test pit locations is presented in Figure 4 in Appendix I. No ground water was encountered in any of the test pits. All of the test pits were refilled with the excavated material after the samples were collected.

Test pit #1 was excavated approximately six feet south of the southern wall of the main building, west of a concrete pad. One soil sample was collected at 2 feet bgs. The test pit was abandoned at approximately 4 feet bgs due to the presence of approximately 4 underground pipes that crossed through the pit. A sweet odor was noted in the soils excavated from test pit #1.

Test pit #2 was excavated approximately 6 feet south of the southern wall of the building in the western end of the fill material. A soil sample was collected at 2 feet bgs. A vertical pipe was observed in the east end of the test pit. Further excavation exposed a corner of an underground storage tank. The tank was filled with yellowish-brown liquid. A second soil sample was collected from approximately 5 feet bgs. A sweet odor was noted in the soils excavated from test pit #2.

The soil in test pits #1 and #2 was fill material. The top eight inches of soil was brown and contained rocks. This material was underlain by approximately 1.5 feet of dark blackish soil. Light brown soil was observed beneath the black colored soil.

Test pit #3 was excavated west of the retaining wall adjacent to the southwest corner of the building. Soil samples were collected at 2 and 5.5 feet bgs. Weathered sandstone was encountered at 5.5 feet bgs and no more material could be excavated.

Test pit #4 was excavated in the fill material north of the northwest portion of the building. An underground storage tank is known to be located at shallow depths near the building, so the test pit was located approximately 10 feet north of the building within the fill material. The fill material consisted of approximately 6 inches of dark soil underlain by brown soil comprised of silt, sand, and clay. Some debris and rocks were observed in the material. No odor or sheen were observed in the soils in test pit #4. A sample was collected at 8 feet bgs.

Test pit #5 was excavated west of the west side of the building, south of the unleaded gasoline tank that was closed-in-place. The soil consisted of brown sand and silty fill material with a layer of bricks and pottery at approximately 3 feet bgs. Soil samples were collected at 2 and 8 feet bgs.

Eight soil samples were collected from the test pits. The soil was collected using Method 5035 B using a plastic syringe. Approximately 10 gram of soil was placed in a pre-weighed vial with methanol. Additional soil from each sample location was placed in 8-ounce soil jars. Samples were immediately placed in an ice cooler. The samples were then transported to CCI Analytical Laboratories in Everett, Washington for analysis via courier. The samples reached the laboratory at approximately 7:30am on April 7, 2006. Each sample was analyzed for diesel and oil range petroleum products and for volatile organic compounds. The petroleum product concentrations were analyzed using the EPA method NWTPH-DX and the volatile organic compound analysis was conducted using the EPA method EPA-8260. Sample 01 was analyzed for diesel and oil using NWTPH-DX with a silica cleanup.

A summary of the laboratory test results are presented in Table 4, below. Copies of the laboratory results are located in Appendix II.

TABLE 4
Soil Sample Laboratory Results

Sample Number	Sample Name and Depth (feet)	Diesel Range (mg/kg)	Oil Range (mg/kg)	Volatile Organic Compounds* (µg/kg)			
				Tetrachloro-ethylene	Cis-1,2,-Dichloroethene	1,3,5-Tri-methylbenzene	1,2,4-Tri-methylbenzene
01	TP1 2’	ND(<25)	**70**	**2100**	ND(<10)	ND(<10)	ND(<10)
02	TP2 2’	ND(<25)	ND(<50)	ND(<10)	ND(<10)	ND(<10)	ND(<10)
03	TP2 5’	ND(<25)	ND(<50)	**260**	**120**	**850**	**390**
04	TP3 2’	ND(<25)	**84**	**23**	ND(<10)	ND(<10)	ND(<10)
05	TP3 5.5’	ND(<25)	**76**	**14**	ND(<10)	ND(<10)	ND(<10)
06	TP4 8’	ND(<25)	**58**	ND(<10)	ND(<10)	ND(<10)	ND(<10)
07	TP5 2’	ND(<25)	ND(<50)	**40**	ND(<10)	ND(<10)	ND(<10)
08	TP5 8’	ND(<25)	ND(<50)	**12**	ND(<10)	ND(<10)	ND(<10)
Method A Soil Cleanup Levels		***2,000***	***2,000***	***50***	***not available***	***not available***	***not available***

*only the four (out of 65) volatile organic compounds detected in the samples are listed in this table
mg/kg = parts per million; ug/kg = parts per billion
ND (<25) = parameter not detected at the bracketed concentration
Shaded areas indicate the sample concentration was above the clean up standard

The results of the laboratory analysis indicate that Sample 01 and Sample 03 exceed the Method A clean up standards for tetrachloroethylene (PERC), a common dry cleaning solvent. Sample 01 had a detection of 2,100 µg/kg and Sample 03 had a detection of PERC at 260 µg/kg. The Method A clean up standard for PERC has been established at 50 µg/kg in the soil, a level determined to protect the quality of ground water and be safe for human health and the environment. Four additional soil samples had detections of PERC, but at levels between 12 and 40 µg/kg, below the clean up standard.

Sample 03, adjacent to an underground storage tank, also had detections of Cis-1,2,-Dichloroethene, 1,3,5-Trimethylbenzene, and 1,2,4-Trimethylbenzene. These volatile organic compounds are associated with paints and dyes and are likely related to the fabric dyeing operations that occurred on the property.

Four of the eight soil samples had detections of oil-range petroleum. The sample detections ranged from 58 to 84 mg/kg, well below the clean up standard of 2,000 mg/kg.

The shallow contamination of PERC detected in Sample 01 is likely from spills that occurred during the dry cleaning operations at the site, as the sample location is near the door of the dry cleaning operations area. The volatile organic compounds detected in Sample 03 are likely from the underground storage tank discovered during our test pit investigation. A fill or vent pipe extended vertically from the tank to approximately 1 foot below the ground surface. The pipe was not capped and may have collect rain water. The tank was full of liquid during our test pit investigation and has the potential to overflow through the pipe.

Based on the presence of volatile organic compounds at levels above the clean up standards, it is our opinion that a clean up should take place on the property prior to any redevelopment of the site.

SECTION 6: CONCLUSIONS

We have performed Phase I and a Phase II Environmental Site Assessments for the subject property at 205 Prospect Street in Bellingham, Washington.

On-Site Contamination

The Phase I investigation indicated that the subject property had previously had dry cleaning and fabric dyeing operations. In addition, two underground storage tanks are known to be located on the subject property that are no longer in use. One tank is located north of the northwest corner of the building and was used to hold fuel for a boiler. A second tank was discovered during our test pit investigation south of the southwest corner of the building and was likely used in the dry cleaning/fabric dyeing operation. Ecology's database indicates that the subject property has had three underground tanks removed. One tank is known to have contained leaded gasoline and was closed-in-place. No information is known about the other two tanks.

Based on these areas of concern, a Phase II soil sampling investigation was completed. Five test pits were excavated around the western end of the building and eight soil samples were collected. The soil samples were analyzed for diesel, oil, and volatile organic compounds. No diesel was detected in any of the samples. Oil was detected in four of the samples at levels well below the clean up standard. Six of the eight samples had detections of tetrachloroethylene, a common dry cleaning solvent. Two of these samples (Samples 01 and 03) had detections of 2,100 and 260 µg/kg of tetrachloroethylene, significantly above the clean up standard of 50 µg/kg. Sample 03 had detections of three additional volatile organic compounds. No clean up standards were available for these compounds.

The volatile organic compound contamination likely stems from spills that occurred during the site's operation as a dry cleaning and from overflow or leaks from an underground storage tank associated with the site's former use as a dry cleaner/fabric dyer. Based on the soil samples collected down gradient of the fill material (test pit #3) which had detections of dry cleaning solvent

at levels below the clean up standard and no volatile organic compounds detected in the ground water samples collected from the adjacent property to the west, the contamination seems to be limited to the fill soils south of the former dry cleaning area.

No issues of contamination were observed with the current operations of the building. No lead or asbestos were observed in the building, except for a pile of roofing material stored on the second story of the building which may potentially contain asbestos.

Potential Off-Site Contamination

Thirty-eight sites were identified within the ASTM radius as potential off-site contamination sources. Three of the sites are located adjacent to the subject property: the Fire Station (map #39), the Accurate Lock site (map #37), and the gas tank beneath Prospect Street (map #36).

The Fire Station site is located adjacent to the south of the subject property. Ecology's database indicates that one UST has been removed from the site. The site is not listed as a contaminated site and is located laterally gradient to the subject property, therefore, it is our opinion that the Fire Station site does not pose a significant risk of contamination to the subject property.

The Accurate Lock and the gas tank beneath Prospect Street sites are located adjacent to the east of the subject property. The sites are not listed on the public databases, but were identified through our historical records search. The status of the tanks (whether they are present or not) is unknown. No odors or sheen indicative of gasoline were observed in the soils during our test pits in the western portion of the subject property. In addition, the soils in the vicinity are mapped as glaciomarine drift, which has a high clay content and slows the movement of gasoline through the subsurface. It is our opinion that the Accurate Lock and the gas tank beneath Prospect Street pose a low risk of contamination to the subject property and no further investigation is warranted.

Recommendations

Based on the testing results the soil on the south side of the building is contaminated with chemicals associated with dry cleaning solvents at levels greater than the Model Toxics Control Act cleanup standard. At present the soil does not pose a risk to human health or the environment, but does pose a risk in the event that the site were to be redeveloped. In addition abandoned underground storage tanks are located on the site. One of these tanks contains liquid that is likely contaminated with dry cleaning solvents.

We recommend that the soil impacted by higher levels of volatile organic compounds be removed from the subject property and disposed of at an appropriate facility. The contamination is likely limited to the fill soils south of the southwestern portion of the subject property, adjacent to the former dry cleaning area of the building.

In addition, we recommend that the two underground storage tanks known to be present on the subject property be removed by a licensed tank removal company. Soil samples should be collected from the soil in the vicinity of the tanks after removal to confirm that the soils are clean.

At this point we do not have a solid number for the volume of soil contaminated. If a high volume estimate of a contaminated area of 20 feet by 20 feet by 10 feet deep area of contamination is assumed, we estimate that the cost of excavation and disposal of the contaminated soil, removal of two underground storage tanks, confirmation clean up sampling, laboratory analyses, and report preparation is on the order of $65,000. The cost of the clean up is largely due to the costs associated with transport and disposal of the soil at a hazardous waste landfill located in eastern Oregon. This cost may be alleviated by judicious excavation and sampling to limit the amount of soil excavated and removed from the site.

APPENDIX I

Figure 1 - Site Vicinity Map
Figure 2 – Aerial Photograph
Figure 3 – General Site Plan with Test Pit Locations
Figures 4 through 8 – Site Photographs

APPENDIX II

Laboratory Test Results

Figure 2. Aerial photograph of subject property and vicinity (2002, City of Bellingham)

Figure 4. View of the front of the Cascade Laundry building, looking west-northwest across Prospect Street.

Figure 5. View of northwest corner of the Cascade Laundry building, looking southeast. Note the retaining wall and fill material on the left side of the photo. The underground storage tank used to hold fuel for the boiler is located near the building within the fill material.

Figure 6. View of the retaining wall south of the southwestern portion of the building, looking east. The dry cleaning operations occurred within the main building in the left side of the photo and the building addition is visible in the background on the right hand side of the photo.

Figure 7. View of test pit #2 in the fill material south of the southwest corner of the building, looking east. The vertical pipe in the far side of the test pit is attached to an underground storage tank.

Figure 8. View of test pit #5 being excavated along the west side of the building, looking south. Disturbed material is visible in the back-central of the photo where test pit #3 was excavated. The closed-in-place underground gasoline tank is located just beyond the telephone pole in the forefront of the photo where the dirt looks reddish.

Notes:

1. All locations and features shown are approximate.
2. This drawing is for informational purposes. It is intended to assist in showing features discussed in an attached document. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Data Sources: Topographic map from Terraserver and the USGS. County boundaries, cities, and waterbodies from Department of Ecology.

Lambert Conformal Conic, Washington State Plane North
North American Datum 1983

0 15 30 60
Feet

Legend

DP-1 = Direct Push Boring (GeoEngineers, 8/10/2007)

TP-1 = Approximate Test Pit Location (Stratum Group, April 2006)

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Site Plan and Surrounding Property Uses

Cascade Laundry Site
Bellingham, Washington

GeoEngineers | Figure 1

Office: BAM Path: P:\0\0000381-031\00\Site Plan.mxd RMB:MS 08/14/2007

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Date(s) Drilled	8/10/07	Logged By	A. Fickeisen	Checked By	R. Bek
Drilling Contractor	ESN	Drilling Method	Direct Push	Sampling Methods	Continuous Macro Core
Auger Data	N/A	Hammer Data	N/A	Drilling Equipment	Limited Access Rig
Total Depth (ft)	27	Surface Elevation (ft)	67	Groundwater Elevation (ft)	55
Vertical Datum		Datum/ System		Easting(x): Northing(y):	

Elevation feet	Depth feet	SAMPLES: Interval	Recovered (in)	Blows/foot	Sub-Sample Number	Testing	Water Level	Graphic Log	Group Symbol	MATERIAL DESCRIPTION	Sheen	Headspace Vapor PID (ppm)	NOTES
	0		36						CC	Cement concrete			
									CL	Dark gray and rust-brown fine sandy clay (moist) (fill)	SS	1	
65					1						SS	1	
					2				SM	Dark gray silty fine sand with lenses of brown sandy clay (moist)	SS	2	
			47								NS		
	5				3				CL	Gray clay with sand (moist) (Bellingham [glaciomarine] Drift)	SS	3	
											NS		
60											NS	2	
			36							- grades to brown	NS	1	
					4				SP	Brown fine to medium sand with occasional gravel (moist) (Deming Sand)	SS	8	
	10										SS	0	
			36						SP	Brown fine to medium sand with lenses of brown clay (dense, moist)	SS	0	
55							▼				NS	1	
										- grades to wet	NS	1	
			36		5	CA					MS	1	
	15										NS	4	
					6						SS	5	
50			36						SP	Brown fine to medium sand (wet)			
											NS	7	
					7						NS	6	
	20		12								NS	1	
					8						SS		
45													
			36								NS	0	
	25								CL	Gray clay with occasional gravel and fine sand lenses (moist) (Kulshan Drift)			
					9						NS	1	
40										Drilling refusal at 27 feet			
	30												

Note: See Figure A-1 for explanation of symbols.

LOG OF DIRECT-PUSH BORING DP-1

GeoEngineers

Project: Cascade Laundry Site
Project Location: Bellingham, WA
Project Number: 0381-031-00

Figure: A-2
Sheet 1 of 1

V6_ENVBORING R:\0\03\0381031\00\WORKING\0381031100 DP.GPJ GEIV6_1.GDT 8/26/08

DRAFT

Date(s) Drilled	8/10/07	Logged By	A. Fickeisen	Checked By	R. Bek
Drilling Contractor	ESN	Drilling Method	Direct Push	Sampling Methods	Continuous Macro Core
Auger Data	N/A	Hammer Data	N/A	Drilling Equipment	Limited Access Rig
Total Depth (ft)	29.5	Surface Elevation (ft)	57	Groundwater Elevation (ft)	Not Determined
Vertical Datum		Datum/ System		Easting(x): Northing(y):	

Depth feet	Recovered (in)	Sub-Sample Number	Testing	Group Symbol	MATERIAL DESCRIPTION	Sheen	Headspace Vapor PID (ppm)	NOTES
0	26	1		TS	Topsoil			
				SM	Brown silty fine to medium sand with gravel (moist) (fill)	SS	0	
4	36	2		SM	Brown silty fine to medium sand with organic matter, wood fragments, and occasional gravel (moist)	SS	0	
						SS	0	
8	34	3	CA	CL	Brown clay with sand and occasional gravel (moist)	SS	0	
				SP-SM	Brown fine to medium sand with silt (moist)	NS	0	
12	36	4	CA	CL	Gray and black clay with organic matter and glass shards (moist)	SS	230	
16	30	5		SP	Brown fine to medium sand with clay lenses, organic matter and rock fragments (moist to wet)	SS	3	
						SS	3	
20	39	6		CL	Gray clay with fine to medium sand (moist) (Bellingham [glaciomarine] Drift)	SS	100	odor
						NS	1	
24	42	7				NS	10	slight odor
						NS	150	
				CL	Gray clay with occasional gravel (moist)	NS	127	
28	38	8	CA	CL	Gray fine to medium sandy clay (moist to wet)	NS	60	
					Drilling refusal at 29.5 feet	SS	140-197	odor

Note: See Figure A-1 for explanation of symbols.

LOG OF DIRECT-PUSH BORING DP-2

GEOENGINEERS

Project: Cascade Laundry Site
Project Location: Bellingham, WA
Project Number: 0381-031-00

Figure: A-3
Sheet 1 of 1

V6 ENVBORING R:\0\0381031\00\WORKING\038103100 DP.GPJ GEIV6_1.GDT 8/26/08

DRAFT

Date(s) Drilled	8/10/07	Logged By	A. Fickeisen	Checked By	R. Bek
Drilling Contractor	ESN	Drilling Method	Direct Push	Sampling Methods	Continuous Macro Core
Auger Data	N/A	Hammer Data	N/A	Drilling Equipment	Limited Access Rig
Total Depth (ft)	27.9	Surface Elevation (ft)	58	Groundwater Elevation (ft)	Not Determined
Vertical Datum		Datum/ System		Easting(x): Northing(y):	

Elevation feet: 55, 50, 45, 40, 35, 30 — Depth feet: 0, 5, 10, 15, 20, 25, 30

SAMPLES

Recovered (in)	Sub-Sample Number	Testing
30	1	
36		
24	2	
48	3	
	4	CA
48	5	
48		
48	6	
	7	CA

Group Symbol	MATERIAL DESCRIPTION
TS	Dark brown silty fine sand with gravel (moist) (topsoil)
SM	Brown silty fine to medium sand with gravel (moist) (fill)
	- brick fragments encountered
CL	Brown fine to medium sandy clay (moist)
SP-SM	Brown fine to medium sand with silt and occasional gravel (moist)
SM	Brown silty fine sand with gravel (moist)
SM	Brown silty fine sand with gravel and wood fragments (moist)
SP-SM	Light brown fine to medium sand with clay and rock fragments (moist)
CL	Dark gray to black fine sandy clay (moist)
CL	Gray clay with fine sand and occasional gravel (moist) (Bellingham [glaciomarine] Drift)

Drilling refusal at 27.9 feet

Sheen	Headspace Vapor PID (ppm)	NOTES
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	1	
NS	1	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
NS	0	
SS	0	
SS	170	
NS	500-900	odor
SS	1,000	
NS	220	odor

Note: See Figure A-1 for explanation of symbols.

V6_ENVBORING R:\01\0381031\00\WORKING\038103100 DP.GPJ GEIV6_1.GDT 8/26/08

LOG OF DIRECT-PUSH BORING DP-3

GEOENGINEERS

Project: Cascade Laundry Site
Project Location: Bellingham, WA
Project Number: 0381-031-00

Figure: A-4
Sheet 1 of 1

DRAFT

Date(s) Drilled	8/10/07	Logged By	A. Fickeisen	Checked By	R. Bek
Drilling Contractor	ESN	Drilling Method	Direct Push	Sampling Methods	Continuous Macro Core
Auger Data	N/A	Hammer Data	N/A	Drilling Equipment	Limited Access Rig
Total Depth (ft)	24.5	Surface Elevation (ft)	59	Groundwater Elevation (ft)	Not Determined
Vertical Datum		Datum/ System		Easting(x): Northing(y):	

Elevation feet	Depth feet	SAMPLES: Interval	Recovered (in)	Blows/foot	Sub-Sample Number	Testing	Water Level	Graphic Log	Group Symbol	MATERIAL DESCRIPTION	Sheen	Headspace Vapor PID (ppm)	NOTES
	0		28						SM	Brown silty fine to medium sand with gravel (moist) (fill)	NS	0	
											NS	0	
					1	CA				- organics encountered	NS	0	
55			32								NS	0	
	5										NS	0	
											NS	0	
											NS	0	
					2				CL	Brown sandy clay (moist)	NS	0	
			15						SC	Brown clayey fine to coarse sand with occasional gravel and lenses of sandy clay (moist)			
50											NS	0	
	10				3						NS	0	
			28						CL	Gray-brown clay with fine to medium sand, organic matter and lenses of silty fine to medium sand	NS	0	
											NS	0	
45											NS	0	
	15				4						NS	0	
			29								NS	0	
											NS	0	
											NS	0	
40											SS	36	
	20		48		5	CA					NS	190	odor
					6				CL	Brown clay with lenses of sand (moist) (Bellingham [glaciomarine] Drift)	NS	0	
											NS	0	
											NS	0	
35			5		7						SS	5	
	25									Drilling refusal at 24.5 feet			
	30												

Note: See Figure A-1 for explanation of symbols.

LOG OF DIRECT-PUSH BORING DP-4

GeoEngineers

Project: Cascade Laundry Site
Project Location: Bellingham, WA
Project Number: 0381-031-00

Figure: A-5
Sheet 1 of 1

V6_ENVBORING R:\0\03\038103100\WORKING\038103100 DP.GPJ GEIV6_1.GDT 8/26/08

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CERTIFICATE OF ANALYSIS

CLIENT: GEOENGINEERS, INC.
600 DUPONT STREET
BELLINGHAM, WA 98225

DATE: 8/23/2007
CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 11:45 DPI-081007-14
CCIL SAMPLE #: -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND	3	1	MG/KG	8/16/2007	DLC
Benzene	EPA-8021	ND	0.03	1	MG/KG	8/16/2007	DLC
Toluene	EPA-8021	ND	0.05	1	MG/KG	8/16/2007	DLC
Ethylbenzene	EPA-8021	ND	0.05	1	MG/KG	8/16/2007	DLC
Xylenes	EPA-8021	ND	0.2	1	MG/KG	8/16/2007	DLC

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.
** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CERTIFICATE OF ANALYSIS

CLIENT: GEOENGINEERS, INC.
600 DUPONT STREET
BELLINGHAM, WA 98225

DATE: 8/23/2007
CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 12:50 DPI-081007-W
CCIL SAMPLE #: 10

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND	50	1	UG/L	8/18/2007	DLC
Benzene	EPA-8021	ND	1	1	UG/L	8/18/2007	DLC
Toluene	EPA-8021	ND	1	1	UG/L	8/18/2007	DLC
Ethylbenzene	EPA-8021	ND	1	1	UG/L	8/18/2007	DLC
Xylenes	EPA-8021	ND	3	1	UG/L	8/18/2007	DLC

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 14:40 DP2-081007-7
CCIL SAMPLE #: 12

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range	NWTPH-HCID	ND	20	1	MG/KG	8/21/2007	EBS
HCID-Diesel Range	NWTPH-HCID	ND	50	1	MG/KG	8/21/2007	EBS
HCID-Oil Range	NWTPH-HCID	ND	100	1	MG/KG	8/21/2007	EBS
Arsenic	EPA-6010	5.5	5	4	MG/KG	8/19/2007	CEO
Cadmium	EPA-6010	ND	1	4	MG/KG	8/19/2007	CEO
Chromium	EPA-6010	47	1	4	MG/KG	8/19/2007	CEO
Lead	EPA-6010	200	5	4	MG/KG	8/19/2007	CEO
Mercury	EPA-7471	0.10	0.02	1	MG/KG	8/22/2007	CEO

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 14:50 DP2-081007-15
CCIL SAMPLE #: 14

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	83	6	2	MG/KG	8/17/2007	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	2600	25	1	MG/KG	8/15/2007	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	3300	50	1	MG/KG	8/15/2007	EBS
Dichlorodifluoromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Chloromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Vinyl Chloride	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Bromomethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Chloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Trichlorofluoromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Acetone	EPA-8260	500	480	9.5	UG/KG	8/15/2007	GAP
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Methylene Chloride	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Acrylonitrile	EPA-8260	ND	50	1	UG/KG	8/14/2007	GAP
Methyl T-Butyl Ether	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,1-Dichloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
2-Butanone	EPA-8260	320	240	4.8	UG/KG	8/21/2007	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
2,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Bromochloromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Chloroform	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,1,1-Trichloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,1-Dichloropropene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Carbon Tetrachloride	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Benzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Trichloroethene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Dibromomethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Bromodichloromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
4-Methyl-2-Pentanone	EPA-8260	ND	50	1	UG/KG	8/14/2007	GAP
Toluene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 14:50 DP2-081007-15
CCIL SAMPLE #: 14

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
1,1,2-Trichloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
2-Hexanone	EPA-8260	ND	50	1	UG/KG	8/14/2007	GAP
1,3-Dichloropropane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Tetrachloroethylene	EPA-8260	1100	100	10	UG/KG	8/21/2007	GAP
Dibromochloromethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,2-Dibromoethane	EPA-8260	ND	5	1	UG/KG	8/14/2007	GAP
Chlorobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Ethylbenzene	EPA-8260	12	10	1	UG/KG	8/14/2007	GAP
M+P Xylene	EPA-8260	21	20	1	UG/KG	8/14/2007	GAP
Styrene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
O-Xylene	EPA-8260	22	10	1	UG/KG	8/14/2007	GAP
Bromoform	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Isopropylbenzene	EPA-8260	110	10	1	UG/KG	8/14/2007	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,2,3-Trichloropropane	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Bromobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
N-Propyl Benzene	EPA-8260	18	10	1	UG/KG	8/14/2007	GAP
2-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,3,5-Trimethylbenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
4-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
T-Butyl Benzene	EPA-8260	50	10	1	UG/KG	8/14/2007	GAP
1,2,4-Trimethylbenzene	EPA-8260	3600	200	20	UG/KG	8/15/2007	GAP
S-Butyl Benzene	EPA-8260	1000	200	20	UG/KG	8/15/2007	GAP
P-Isopropyltoluene	EPA-8260	27	10	1	UG/KG	8/14/2007	GAP
1,3 Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
1,4-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
N-Butylbenzene	EPA-8260	64	10	1	UG/KG	8/14/2007	GAP
1,2-Dichlorobenzene	EPA-8260	67	10	1	UG/KG	8/14/2007	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	50	1	UG/KG	8/14/2007	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Hexachlorobutadiene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP
Naphthalene	EPA-8260	26	10	1	UG/KG	8/14/2007	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	8/14/2007	GAP

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BELLINGHAM, WA 98225

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DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 14:50 DP2-081007-15
CCIL SAMPLE #: 14

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY WEATHERED MINERAL SPIRITS, HIGHLY WEATHERED DIESEL FUEL AND LUBE OIL.

OIL RANGE RESULT IS BIASED HIGH DUE TO DIESEL RANGE PRODUCT OVERLAP.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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600 DUPONT STREET
BELLINGHAM, WA 98225

DATE: 8/23/2007
CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 15:40 DP2-081007-29
CCIL SAMPLE #: 17

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	110	15	5	MG/KG	8/17/2007	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND	25	1	MG/KG	8/15/2007	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	ND	50	1	MG/KG	8/15/2007	EBS
Dichlorodifluoromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Chloromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Vinyl Chloride	EPA-8260	84	60	6	UG/KG	8/15/2007	GAP
Bromomethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Chloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Trichlorofluoromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Acetone	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
1,1-Dichloroethene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Methylene Chloride	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Acrylonitrile	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
Methyl T-Butyl Ether	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,1-Dichloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
2-Butanone	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
Cis-1,2-Dichloroethene	EPA-8260	320	60	6	UG/KG	8/15/2007	GAP
2,2-Dichloropropane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Bromochloromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Chloroform	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,1,1-Trichloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,1-Dichloropropene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Carbon Tetrachloride	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2-Dichloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Benzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Trichloroethene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2-Dichloropropane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Dibromomethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Bromodichloromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
4-Methyl-2-Pentanone	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
Toluene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP

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CERTIFICATE OF ANALYSIS

CLIENT: GEOENGINEERS, INC.
600 DUPONT STREET
BELLINGHAM, WA 98225

DATE: 8/23/2007
CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 15:40 DP2-081007-29
CCIL SAMPLE #: 17

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
1,1,2-Trichloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
2-Hexanone	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
1,3-Dichloropropane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Tetrachloroethylene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Dibromochloromethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2-Dibromoethane	EPA-8260	ND	30	6	UG/KG	8/15/2007	GAP
Chlorobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	1700	60	6	UG/KG	8/15/2007	GAP
Ethylbenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
M+P Xylene	EPA-8260	ND	120	6	UG/KG	8/15/2007	GAP
Styrene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
O-Xylene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Bromoform	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Isopropylbenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2,3-Trichloropropane	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Bromobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
N-Propyl Benzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
2-Chlorotoluene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,3,5-Trimethylbenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
4-Chlorotoluene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
T-Butyl Benzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2,4-Trimethylbenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
S-Butyl Benzene	EPA-8260	280	60	6	UG/KG	8/15/2007	GAP
P-Isopropyltoluene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,3 Dichlorobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,4-Dichlorobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
N-Butylbenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2-Dichlorobenzene	EPA-8260	160	60	6	UG/KG	8/15/2007	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	300	6	UG/KG	8/15/2007	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Hexachlorobutadiene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
Naphthalene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	60	6	UG/KG	8/15/2007	GAP

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BELLINGHAM, WA 98225

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CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 15:40 DP2-081007-29
CCIL SAMPLE #: 17

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED MINERAL SPIRITS.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 16:10 DP3-081007-13
CCIL SAMPLE #: 21

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range	NWTPH-HCID	ND	20	1	MG/KG	8/21/2007	EBS
HCID-Diesel Range	NWTPH-HCID	ND	50	1	MG/KG	8/21/2007	EBS
HCID-Oil Range	NWTPH-HCID	ND	100	1	MG/KG	8/21/2007	EBS
Arsenic	EPA-6010	ND	5	4	MG/KG	8/19/2007	CEO
Cadmium	EPA-6010	ND	1	4	MG/KG	8/19/2007	CEO
Chromium	EPA-6010	20	1	4	MG/KG	8/19/2007	CEO
Lead	EPA-6010	ND	5	4	MG/KG	8/19/2007	CEO
Mercury	EPA-7471	0.03	0.02	1	MG/KG	8/22/2007	CEO

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 16:47 DP3-081007-26
CCIL SAMPLE #: 24

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	930	150	50	MG/KG	8/16/2007	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND	25	1	MG/KG	8/15/2007	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	ND	50	1	MG/KG	8/15/2007	EBS
Dichlorodifluoromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Vinyl Chloride	EPA-8260	1300	80	8	UG/KG	8/15/2007	GAP
Bromomethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trichlorofluoromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Acetone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,1-Dichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Methylene Chloride	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Acrylonitrile	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Methyl T-Butyl Ether	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trans-1,2-Dichloroethene	EPA-8260	120	80	8	UG/KG	8/15/2007	GAP
1,1-Dichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2-Butanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Cis-1,2-Dichloroethene	EPA-8260	5700	800	80	UG/KG	8/15/2007	GAP
2,2-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromochloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloroform	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1,1-Trichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Carbon Tetrachloride	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Benzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Dibromomethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromodichloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
4-Methyl-2-Pentanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Toluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP

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600 DUPONT STREET
BELLINGHAM, WA 98225

DATE: 8/23/2007
CCIL JOB #: 0708056
DATE RECEIVED: 8/14/2007
WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 16:47 DP3-081007-26
CCIL SAMPLE #: 24

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
1,1,2-Trichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2-Hexanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,3-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Tetrachloroethylene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Dibromochloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dibromoethane	EPA-8260	ND	40	8	UG/KG	8/15/2007	GAP
Chlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Ethylbenzene	EPA-8260	1200	80	8	UG/KG	8/15/2007	GAP
M+P Xylene	EPA-8260	ND	160	8	UG/KG	8/15/2007	GAP
Styrene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
O-Xylene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromoform	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Isopropylbenzene	EPA-8260	1600	80	8	UG/KG	8/15/2007	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2,3-Trichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
N-Propyl Benzene	EPA-8260	3200	80	8	UG/KG	8/15/2007	GAP
2-Chlorotoluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,3,5-Trimethylbenzene	EPA-8260	720	80	8	UG/KG	8/15/2007	GAP
4-Chlorotoluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
T-Butyl Benzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2,4-Trimethylbenzene	EPA-8260	270	80	8	UG/KG	8/15/2007	GAP
S-Butyl Benzene	EPA-8260	2400	80	8	UG/KG	8/15/2007	GAP
P-Isopropyltoluene	EPA-8260	1200	80	8	UG/KG	8/15/2007	GAP
1,3 Dichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,4-Dichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
N-Butylbenzene	EPA-8260	3500	80	8	UG/KG	8/15/2007	GAP
1,2-Dichlorobenzene	EPA-8260	160	80	8	UG/KG	8/15/2007	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Hexachlorobutadiene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Naphthalene	EPA-8260	1800	80	8	UG/KG	8/15/2007	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 16:47 DP3-081007-26
CCIL SAMPLE #: 24

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY WEATHERED MINERAL SPIRITS AND GASOLINE.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 17:30 DP4-081007-3.5
CCIL SAMPLE #: 25

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range	NWTPH-HCID	ND	20	1	MG/KG	8/21/2007	EBS
HCID-Diesel Range	NWTPH-HCID	ND	50	1	MG/KG	8/21/2007	EBS
HCID-Oil Range	NWTPH-HCID	ND	100	1	MG/KG	8/21/2007	EBS
Arsenic	EPA-6010	8.1	5	4	MG/KG	8/19/2007	CEO
Cadmium	EPA-6010	1.2	1	4	MG/KG	8/19/2007	CEO
Chromium	EPA-6010	54	1	4	MG/KG	8/19/2007	CEO
Lead	EPA-6010	99	5	4	MG/KG	8/19/2007	CEO
Mercury	EPA-7471	0.13	0.02	1	MG/KG	8/22/2007	CEO

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 17:48 DP4-081007-20
CCIL SAMPLE #: 29

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	380	30	10	MG/KG	8/16/2007	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND	25	1	MG/KG	8/15/2007	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	ND	50	1	MG/KG	8/15/2007	EBS
Dichlorodifluoromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Vinyl Chloride	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromomethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trichlorofluoromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Acetone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,1-Dichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Methylene Chloride	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Acrylonitrile	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Methyl T-Butyl Ether	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trans-1,2-Dichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1-Dichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2-Butanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Cis-1,2-Dichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2,2-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromochloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Chloroform	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1,1-Trichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Carbon Tetrachloride	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Benzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trichloroethene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Dibromomethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromodichloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Trans-1,3-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
4-Methyl-2-Pentanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
Toluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Cis-1,3-Dichloropropene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP

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WDOE ACCREDITATION #: C142

CLIENT CONTACT: RON BEK
CLIENT PROJECT ID: 0381-031-00
CLIENT SAMPLE ID: 8/10/2007 17:48 DP4-081007-20
CCIL SAMPLE #: 29

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
1,1,2-Trichloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2-Hexanone	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,3-Dichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Tetrachloroethylene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Dibromochloromethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dibromoethane	EPA-8260	ND	40	8	UG/KG	8/15/2007	GAP
Chlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1,1,2-Tetrachloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Ethylbenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
M+P Xylene	EPA-8260	ND	160	8	UG/KG	8/15/2007	GAP
Styrene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
O-Xylene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromoform	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Isopropylbenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,1,2,2-Tetrachloroethane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2,3-Trichloropropane	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Bromobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
N-Propyl Benzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
2-Chlorotoluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,3,5-Trimethylbenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
4-Chlorotoluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
T-Butyl Benzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2,4-Trimethylbenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
S-Butyl Benzene	EPA-8260	120	80	8	UG/KG	8/15/2007	GAP
P-Isopropyltoluene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,3 Dichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,4-Dichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
N-Butylbenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
1,2-Dibromo 3-Chloropropane	EPA-8260	ND	400	8	UG/KG	8/15/2007	GAP
1,2,4-Trichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Hexachlorobutadiene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP
Naphthalene	EPA-8260	76	80	8	UG/KG	8/15/2007	GAP
1,2,3-Trichlorobenzene	EPA-8260	ND	80	8	UG/KG	8/15/2007	GAP

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DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY MINERAL SPIRITS.

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT PROJECT ID: 0381-031-00

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID		METHOD	SUR ID	SPIKE AMOUNT	% RECV
0708056-05		NWTPH-GX	TFT	250 PPB	72
0708056-05		EPA-8021	TFT	250 PPB	71
0708056-10		NWTPH-GX	TFT	0.5 PPM	81
0708056-10		EPA-8021	TFT	0.5 PPM	75
0708056-12		NWTPH-HCID	BCB	50 PPM	117
0708056-12		NWTPH-HCID	C25	10 PPM	116
0708056-14		NWTPH-GX	TFT	250 PPB	84
0708056-14		NWTPH-DX W/CLEANUP	C25	5 PPM	103
0708056-14		EPA-8260	1,2-Dichloroethane-d4	100 PPB	85
0708056-14		EPA-8260	Toluene-d8	100 PPB	105
0708056-14		EPA-8260	4-Bromofluorobenzene	100 PPB	63**
0708056-14	1st DILUTION	EPA-8260	1,2-Dichloroethane-d4	100 PPB	80
0708056-14	1st DILUTION	EPA-8260	Toluene-d8	100 PPB	81
0708056-14	1st DILUTION	EPA-8260	4-Bromofluorobenzene	100 PPB	97
0708056-14	2nd DILUTION	EPA-8260	1,2-Dichloroethane-d4	100 PPB	99
0708056-14	2nd DILUTION	EPA-8260	Toluene-d8	100 PPB	103
0708056-14	2nd DILUTION	EPA-8260	4-Bromofluorobenzene	100 PPB	99
0708056-17		NWTPH-GX	TFT	250 PPB	92
0708056-17		NWTPH-DX W/CLEANUP	C25	5 PPM	96
0708056-17		EPA-8260	1,2-Dichloroethane-d4	100 PPB	79
0708056-17		EPA-8260	Toluene-d8	100 PPB	82
0708056-17		EPA-8260	4-Bromofluorobenzene	100 PPB	97
0708056-21		NWTPH-HCID	BCB	50 PPM	136
0708056-21		NWTPH-HCID	C25	10 PPM	140
0708056-24		NWTPH-GX	TFT	250 PPB	*
0708056-24		NWTPH-DX W/CLEANUP	C25	5 PPM	124
0708056-24		EPA-8260	1,2-Dichloroethane-d4	100 PPB	98
0708056-24		EPA-8260	Toluene-d8	100 PPB	83
0708056-24		EPA-8260	4-Bromofluorobenzene	100 PPB	92
0708056-24	DILUTION	EPA-8260	1,2-Dichloroethane-d4	100 PPB	84
0708056-24	DILUTION	EPA-8260	Toluene-d8	100 PPB	80
0708056-24	DILUTION	EPA-8260	4-Bromofluorobenzene	100 PPB	93
0708056-25		NWTPH-HCID	BCB	50 PPM	123
0708056-25		NWTPH-HCID	C25	10 PPM	134

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QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	SPIKE AMOUNT	% RECV
0708056-29	NWTPH-GX	TFT	250 PPB	*
0708056-29	NWTPH-DX W/CLEANUP	C25	5 PPM	116
0708056-29	EPA-8260	1,2-Dichloroethane-d4	100 PPB	79
0708056-29	EPA-8260	Toluene-d8	100 PPB	82
0708056-29	EPA-8260	4-Bromofluorobenzene	100 PPB	101

* SURROGATE DILUTED OUT OF CALIBRATION RANGE.

** SURROGATE OUTSIDE OF CONTROL LIMITS OF 77-120% DUE TO MATRIX EFFECT.

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QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	RESULT	ASSOCIATED SAMPLES
NWTPH-GX (TPH-Volatile Range)	ND(<3)	0708056 -5,14,17,24,29
EPA-8021 (Benzene)	ND(<0.03)	0708056 -05
EPA-8021 (Toluene)	ND(<0.05)	0708056 -05
EPA-8021 (Ethylbenzene)	ND(<0.05)	0708056 -05
EPA-8021 (Xylenes)	ND(<0.2)	0708056 -05
NWTPH-DX (TPH-Diesel Range)	ND(<25)	0708056 -14,17,24,29
NWTPH-DX (TPH-Oil Range)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (Dichlorodifluoromethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Chloromethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Vinyl Chloride)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Bromomethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Chloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Trichlorofluoromethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Acetone)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (1,1-Dichloroethene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Methylene Chloride)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Acrylonitrile)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (Methyl T-Butyl Ether)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Trans-1,2-Dichloroethene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1-Dichloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (2-Butanone)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (Cis-1,2-Dichloroethene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (2,2-Dichloropropane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Bromochloromethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Chloroform)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1,1-Trichloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1-Dichloropropene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Carbon Tetrachloride)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2-Dichloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Benzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Trichloroethene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2-Dichloropropane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Dibromomethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Bromodichloromethane)	ND(<10)	0708056 -14,17,24,29

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QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	RESULT	ASSOCIATED SAMPLES
EPA-8260 (Trans-1,3-Dichloropropene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (4-Methyl-2-Pentanone)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (Toluene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Cis-1,3-Dichloropropene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1,2-Trichloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (2-Hexanone)	ND(<50)	0708056 -14,17,24,29
EPA-8260 (1,3-Dichloropropane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Tetrachloroethylene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Dibromochloromethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2-Dibromoethane)	ND(<5)	0708056 -14,17,24,29
EPA-8260 (Chlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1,1,2-Tetrachloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Ethylbenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (M+P Xylene)	ND(<20)	0708056 -14,17,24,29
EPA-8260 (Styrene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (O-Xylene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Bromoform)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Isopropylbenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,1,2,2-Tetrachloroethane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2,3-Trichloropropane)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Bromobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (N-Propyl Benzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (2-Chlorotoluene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,3,5-Trimethylbenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (4-Chlorotoluene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (T-Butyl Benzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2,4-Trimethylbenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (S-Butyl Benzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (P-Isopropyltoluene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,3 Dichlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,4-Dichlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (N-Butylbenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2-Dichlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2-Dibromo 3-Chloropropane)	ND(<50)	0708056 -14,17,24,29

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QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	RESULT	ASSOCIATED SAMPLES
EPA-8260 (1,2,4-Trichlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Hexachlorobutadiene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (Naphthalene)	ND(<10)	0708056 -14,17,24,29
EPA-8260 (1,2,3-Trichlorobenzene)	ND(<10)	0708056 -14,17,24,29
EPA-6010 (Arsenic)	ND(<5.0)	0708056 -12, 21, 25
EPA-6010 (Cadmium)	ND(<1.0)	0708056 -12, 21, 25
EPA-6010 (Chromium)	ND(<1.0)	0708056 -12, 21, 25
EPA-6010 (Lead)	ND(<5.0)	0708056 -12, 21, 25
EPA-7471 (Mercury)	ND(<0.02)	0708056 -12, 21, 25
NWTPH-GX (TPH-Volatile Range)	ND(<50)	0708056 -10
EPA-8021 (Benzene)	ND(<1)	0708056 -10
EPA-8021 (Toluene)	ND(<1)	0708056 -10
EPA-8021 (Ethylbenzene)	ND(<1)	0708056 -10
EPA-8021 (Xylenes)	ND(<3)	0708056 -10

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QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	ANALYTE	ASSOCIATED SAMPLES	SPIKE AMOUNT	DILUTION FACTOR	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	TPH-Volatile Range	0708056 -5,14,17,24,29	25 MG/KG	1	112 %	119 %	6
EPA-8021	Benzene	0708056 -05	1 MG/KG	1	97 %	93 %	4
EPA-8021	Toluene	0708056 -05	1 MG/KG	1	98 %	94 %	4
EPA-8021	Ethylbenzene	0708056 -05	1 MG/KG	1	96 %	91 %	5
EPA-8021	Xylenes	0708056 -05	3 MG/KG	1	96 %	92 %	4
NWTPH-DX	TPH-Diesel Range	0708056 -14,17,24,29	125 MG/KG	1	85 %	89 %	5
EPA-8260	1,1-Dichloroethene	0708056 -14,17,24,29	10 UG/KG	1	110 %	105 %	5
EPA-8260	Benzene	0708056 -14,17,24,29	10 UG/KG	1	106 %	98 %	8
EPA-8260	Trichloroethene	0708056 -14,17,24,29	10 UG/KG	1	97 %	95 %	3
EPA-8260	Toluene	0708056 -14,17,24,29	10 UG/KG	1	99 %	95 %	4
EPA-8260	Chlorobenzene	0708056 -14,17,24,29	10 UG/KG	1	97 %	91 %	6
EPA-6010	Arsenic	0708056 -12, 21, 25	20 MG/KG	1	112 %	111 %	1
EPA-6010	Cadmium	0708056 -12, 21, 25	20 MG/KG	1	98 %	98 %	0
EPA-6010	Chromium	0708056 -12, 21, 25	20 MG/KG	1	109 %	109 %	0
EPA-6010	Lead	0708056 -12, 21, 25	20 MG/KG	1	110 %	109 %	1
EPA-7471	Mercury	0708056 -12, 21, 25	1 MG/KG	1	91 %	95 %	4
NWTPH-GX	TPH-Volatile Range	0708056 -10	500 UG/L	1	114 %	108 %	5
EPA-8021	Benzene	0708056 -10	20 UG/L	1	88 %	92 %	4
EPA-8021	Toluene	0708056 -10	20 UG/L	1	96 %	99 %	3
EPA-8021	Ethylbenzene	0708056 -10	20 UG/L	1	96 %	100 %	4
EPA-8021	Xylenes	0708056 -10	60 UG/L	1	97 %	100 %	3

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SITE CHARACTERIZATION REPORT
CASCADE LAUNDRY & CLEANERS, INC.
205 PROSPECT STREET
BELLINGHAM, WASHINGTON
FSID #21786898

prepared for:

Cascade Laundry and Cleaners, Inc.
205 Prospect Street
Bellingham, WA 98225

March 15, 2011

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compliance consulting

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FSID #21786898

Prepared for

Cascade Laundry and Cleaners, Inc.
205 Prospect Street
Bellingham, WA 98225

Prepared by

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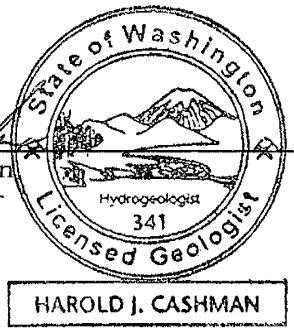
Bellingham, Washington 98225

March 15, 2011



Harold Cashman
Project Manager

Thomas Davis
QA/QC Reviewer

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1.0 INTRODUCTION

A release of petroleum products to soil was discovered at 205 Prospect Street in Bellingham, Washington (Figure 1) on October 13, 2010 during an underground storage tank (UST) site assessment. Following removal of an abandoned 300 gallon UST, suspected to have stored mineral spirits and/or tetrachloroethylene (PERC), soil samples were collected from the excavation sidewalls and floor. Field screening observations and laboratory analytical results confirmed that gasoline range total petroleum hydrocarbons (TPH), xylenes, and PERC were released to soil surrounding the tank at concentrations which exceeded the Model Toxics Control Act (MTCA) Method A target cleanup levels. Laboratory analyses indicated that the gasoline range TPH likely consisted of mineral spirits. Mineral spirits and PERC were common dry cleaning solvents used in the past.

The field screening results and soil sample data collected October 13, 2010 confirmed that a release had occurred from the 300 gallon underground storage tank, therefore, per the MTCA cleanup regulation, a formal site characterization was conducted at the site on January 24, 2011.

Five soil borings were advanced in the vicinity of the former UST tank pit. The borings were drilled to characterize the extent of the release to soil and groundwater. One boring was drilled within the tank pit; two borings were drilled to the west of the tank pit, and one boring was drilled to the south and one to the east of the tank pit. The soil boring locations are shown on Figure 2.

Soil and groundwater samples were collected from each boring location. Concentrations of gasoline range TPH (mineral spirits) exceeding the MTCA Method A cleanup level were found in soil samples collected at depths ranging from 14 to 25 feet and in all water samples collected. Concentrations of PERC exceeding MTCA Method A cleanup levels were found in soil samples collected at depths of 24 to 30 feet in borings B-2 and B-5 and in groundwater samples collected from borings B-2 and B-3.

This Site Characterization report was prepared by Whatcom Environmental Services Inc. on behalf of Cascade Laundry and Cleaners Inc. The report documents the results of a site characterization conducted in accordance with WAC 173-340-450(5)(b).

2.0 SITE DESCRIPTION

The site is located at 205 Prospect Street in Bellingham, Washington as shown on Figure 1. The property is located in the downtown portion of Bellingham in the northwest quarter of the southwest quarter of Section 30, Township 38N, Range 3E. The site is located in an area zoned Commercial and is currently vacant.

The site is listed in the Washington State UST database with Facility Site ID Number (FS ID#) 21786898. Three abandoned USTs have been closed at the site. Two USTs were removed from the site and one was closed in place. No USTs are currently in service at the subject property. This site characterization effort was focused on the 300 gallon UST (decommissioned on October 13, 2010) which was formerly located on the south side of the building. The abandoned tank was assumed to have historically stored mineral spirits and/or PERC for dry cleaning use until the 1960s based on the history of the subject property. Anecdotal evidence provided by the current property owner indicated that Cascade Laundry and Cleaners, Inc. was unaware of the presence of the PERC UST and had never stocked or used mineral spirits or PERC at the property. A map showing the location of the removed UST and other pertinent site features is provided as Figure 2.

2.1 Site Topography and Surrounding Area

The subject property is located approximately 0.1 miles northeast of the mouth of Whatcom Creek and has a median elevation of 60 feet above mean sea level. The majority of the property is level, however the western portion of the property slopes downward slightly towards the west. The site is located on a bluff which slopes down to the west towards the Holly Street Landfill. A site location map is provided as Figure 1.

The Holly Street Landfill is located immediately west of the subject property. A former gasoline fueling station was located to the east of the subject property across Prospect Street at 200 Prospect Street from the 1920s to the 1970s.

2.2 Site Geology

The property is underlain by Bellingham Glaciomarine drift which consists of moderately sorted to unsorted diamicton with lenses and discontinuous beds of moderately to

well-sorted gravel, sand, silt, and clay. Bedding is massive to poorly stratified. Color is blue-gray to olive-gray depending on oxidation state. Thickness ranges to as much as 90 meters. The unit is consistently firm to plastic, depending on moisture content. The unit is predominantly dry to slightly moist (WSDNR, 2000). The unit acts as an aquitard, impeding vertical migration of contaminants.

2.3 Site Hydrogeology

The depth to groundwater at the site on the day the soil borings were drilled ranged from 12 to 17 feet below ground surface, depending on the ground elevation at the boring locations. Groundwater was encountered in sand lenses interbeded in saturated silty clay at depths below approximately 12 to 17 feet. Based on the site topography, the groundwater flow direction is assumed to flow to the west.

3.0 RELEASE INFORMATION

Failure of the UST system integrity is the suspected source of the release. The date of the release and tank abandonment is unknown. The leak occurred at an unknown date prior to the removal and closure of the tank on October 13, 2010.

The current property owner reported that the tank piping may have been ruptured in 2006 by a contractor (Stratum Group) during investigative environmental work undertaken by a prospective purchaser of the property.

At the time of tank closure the soil adjacent to and beneath the tank was sampled and confirmed to have been impacted by gasoline range TPH, BTEX constituents and PERC at concentrations exceeding the MTCA Method A target cleanup levels.

4.0 INVESTIGATIVE METHODS

The soil boring locations were chosen based on knowledge of the location of the confirmed release and based on the topography of the release site. Five soil borings were drilled by Cascade Drilling using a direct-push hydraulic and percussion drive-point sampling system on January 24, 2011. One boring was drilled within the tank pit; two borings were drilled to the west of the tank pit, one boring was drilled to the south of the tank pit and one boring was drilled to the east of the tank pit. Soil boring locations are shown on Figure 2.

Subsurface utilities were located prior to drilling. The drill rig equipment was decontaminated prior to drilling each test hole. The borings were continuously cored to depths ranging from 20 to 30 feet below grade. Soil cores were logged in the field and soil descriptions generally followed ASTM D 2487 'Unified Soil Classification System' procedures for description and identification of soils. The soil cores were evaluated for organic vapors using a photoionization detector (PID) and flame ionization detector (FID) and for petroleum products using sheen tests. The test holes were backfilled to the surface using bentonite-based grout materials specified in WAC 173-160. Soil boring logs are included in Appendix A.

Immediately after the soil cores were described a portion of the sample was sheen tested and the remainder of the sample was placed in labeled re-sealable bags. Sheen test results were recorded as NS – no sheen, VSS – very slight sheen, SS – slight sheen, MS – moderate sheen, and HS – heavy sheen. The PID or FID was inserted into the re-sealable bag in order to evaluate the presence of organic vapors, and a headspace reading was measured and organic vapor detections in parts per million (ppm) were recorded on the borelogs. Results from the sheen tests and PID/FID measurements are summarized in Table 1 and on the borelogs in Appendix A.

Soil samples were collected for laboratory analysis from each soil boring from depths determined based on field screening results. Groundwater samples were also collected for laboratory analysis from each boring location.

5.0 SOIL AND GROUNDWATER SCREENING LEVELS

Based on the historical use of the site as dry cleaning and laundry facility, soil and water samples collected from the site were analyzed for gasoline range TPH using Method NWTPH-Gx, BTEX constituents using EPA Method 8021, and PERC using EPA Method 8260.

The soil screening levels for the site were established for unrestricted land use in accordance with the Model Toxics Control Act (MTCA) WAC 173-340. MTCA Method A target cleanup levels are provided in WAC 173-340, Table 740-1.

The water screening levels for the site were established for unrestricted land use in accordance with the Model Toxics Control Act (MTCA) WAC 173-340. MTCA Method A water target cleanup levels are provided in WAC 173-340, Table 720-1.

The soil and water data were compared to the applicable MTCA Method A concentrations. MTCA Method A target cleanup levels for soil are shown on Table 2 and MTCA Method A target cleanup levels for water are shown on Table 3.

6.0 INVESTIGATION FINDINGS

The information gathered during the subsurface investigation described herein indicates that soil and groundwater at the five boring locations have been impacted by a release of mineral spirits. All samples (both soil and water) collected from the borings contained detectable concentrations of gasoline range TPH (mineral spirits), BTEX constituents or tetrachloroethylene (PERC).

Seven soil samples were chosen for analysis from the five boring locations based on field screening results. Soil samples were collected for laboratory analysis for gasoline range TPH, BTEX constituents and PERC. Soil sample analytical methods included NWTPH-Gx for gasoline range TPH, EPA-8021 for BTEX constituents and EPA-8260 for PERC in accordance with WAC 173-340, Table 830-1. All soil samples were collected using EPA Method 5035A. Soil sample descriptions, including field screening results and sample depths, are presented in Table 1. A summary of the soil sample laboratory analytical data are presented in Table 2. The soil boring logs are included in Appendix A.

Groundwater samples were also collected from each boring location though a slotted stainless steel screen using a peristaltic pump. Groundwater samples were collected for laboratory analysis for gasoline range TPH, BTEX constituents and PERC. Groundwater sample analytical methods included NWTPH-Gx for gasoline range TPH, EPA-8021 for BTEX constituents and EPA-8260 for PERC. The original laboratory sample analytical data reports are included in Appendix B.

6.1 Boring B-1

Soil boring B-1 was drilled approximately 20 feet west of the tank pit at a lower elevation than the tank location (Figure 2). Field screening results from soil cores extracted from the boring at depths of 5 to 10 feet below ground surface (bgs) indicated no presence of petroleum contamination. Field screening of soil samples collected from depths of 10 to 20 feet bgs exhibited moderate sheens with organic vapor detections ranging from 1,532 ppm to 1,701 ppm.

Laboratory analysis of a soil sample collected from 17-18 feet in the boring confirmed the presence of gasoline range TPH at a concentration of 1,500 mg/kg (identified as mineral spirits) which exceeded the MTCA Method A target cleanup level of 100 mg/kg. BTEX

constituents and PERC were not detected above their respective MTCA Method A target cleanup levels. PERC was detected at a concentration of 0.029 mg/kg which was below the Method A target cleanup level of 0.05 mg/kg. (Table 2).

The groundwater sample collected from boring B-1 contained mineral spirits at a concentration of 4,400 ug/L, which exceeded the MTCA Method A target cleanup level of 1,000 ug/L. BTEX constituents were not detected above their respective MTCA Method A target cleanup levels. PERC was not detected in the sample.

6.2 Boring B-2

Soil boring B-2 was drilled approximately 12 feet west of the tank pit (Figure 2). Field screening of soil collected from the boring at a depth of 10 to 15 feet bgs revealed a very slight sheen. Field screening of soil samples collected from depths of 15 to 30 feet bgs exhibited moderate sheens with organic vapor detections ranging from 3,800 ppm to 7,451 ppm.

Laboratory analysis of a soil sample collected from 24-25 feet bgs in the boring contained mineral spirits at a concentration of 1,200 mg/kg which exceeded the MTCA Method A target cleanup level of 100 mg/kg. BTEX constituents were not detected above their respective MTCA Method A cleanup levels. PERC was detected at a concentration of 45.0 mg/kg which exceeded the MTCA Method A target cleanup level of 0.05 mg/kg (Table 2).

The groundwater sample collected from boring B-2 contained mineral spirits at a concentration of 13,000 ug/L, which exceeded the MTCA Method A target cleanup level of 1,000 ug/L. Benzene was detected at a concentration of 21 ug/L, which exceeded the MTCA Method A cleanup level of 5 ug/L. Toluene, ethylbenzene, and xylenes were not detected above their respective MTCA Method A target cleanup levels. PERC was detected at a concentration of 3,100 ug/L, which exceeded the MTCA Method A target cleanup level of 5 ug/L.

6.3 Boring B-3

Soil boring B-3 was drilled within the tank pit excavation (Figure 2). The first 9 feet of soil consisted of clean backfill material placed in the excavation after the tank was removed from the ground. Below the backfill two layers of clay were encountered at depths of 11 to 15 feet bgs and 25 to 30 feet bgs. Between the layers of clay, at depths of 15 to 25 feet bgs lenses of silt, clay and sand were encountered which exhibited slight to heavy sheens and organic vapor readings ranging from 58 ppm to 6,388 ppm.

Two soil samples were collected from boring B-3. One sample was collected from 17-18 feet bgs where the highest organic vapor detection was documented. A second soil sample was collected from the bottom of the boring at a depth of 30 feet in an effort to delineate the total depth of contamination beneath the former tank location.

Laboratory analysis of the soil sample collected at 17-18 feet bgs contained mineral spirits at a concentration of 1,300 mg/kg which exceeded the MTCA Method A target cleanup level of 100 mg/kg. Benzene, toluene, and ethylbenzene, and PERC were not detected above their respective MTCA Method A cleanup levels. Xylenes were detected at a concentration of 9.4 mg/kg, which exceeded the MTCA Method A cleanup level of 9 mg/kg. PERC was detected at a concentration of 0.038 which was below the Method A target cleanup level of 0.05 mg/kg.

Laboratory analysis of the soil sample collected at 30 feet bgs did not contain concentrations of mineral spirits, BTEX constituents, or PERC which exceeded the MTCA Method A target cleanup levels. PERC was detected at a concentration of 0.024 mg/kg which was below the Method A target cleanup level of 0.05 mg/kg.

The groundwater sample collected from boring B-3 contained mineral spirits at a concentration of 9,700 ug/L, which exceeded the MTCA Method A target cleanup level of 1,000 ug/L. Benzene was detected at a concentration of 14 ug/L, which exceeded the MTCA Method A cleanup level of 5 ug/L. Toluene, ethylbenzene, and xylenes were detected at concentrations below their respective MTCA Method A target cleanup levels. PERC was detected at a concentration of 5.4 ug/L, which exceeded the MTCA Method A target cleanup level of 5 ug/L.

6.4 Boring B-4

Soil boring B-4 was drilled approximately 10 feet east of the tank pit excavation (Figure 2). Field screening of soil from 0 to 8 feet bgs revealed no evidence of petroleum contamination. Field screening of soil cores collected from 8 to 15 feet bgs yielded slight to heavy sheens and organic vapor concentrations ranging from 50 ppm to 2,891 ppm.

Laboratory analysis of a soil sample collected from 14-15 feet bgs contained mineral spirits at a concentration of 730 mg/kg which exceeded the MTCA Method A target cleanup level of 100 mg/kg. Benzene, toluene, and PERC were not detected. Ethylbenzene and xylenes were detected at concentrations below their respective Method A target cleanup levels (Table 2).

The groundwater sample collected from boring B-4 contained mineral spirits at a concentration of 5,700 ug/L, which exceeded the MTCA Method A target cleanup level of 1,000

ug/L. Benzene was detected at a concentration of 49 ug/L, which exceeded the MTCA Method A cleanup level of 5 ug/L. Toluene, ethylbenzene, xylenes, and PERC were detected at concentrations below their respective MTCA Method A target cleanup levels. PERC was detected at a concentration of 3.9 ug/L, below the Method A target cleanup level of 5 ug/L.

6.5 Boring B-5

Soil boring B-5 was drilled approximately 10 feet south of the tank pit excavation (Figure 2). Field screening of soil from 0 to 10 feet bgs revealed a very slight to slight sheen and low organic vapor detections. Field screening of soil from 10 to 28 feet yielded moderate to heavy sheens and organic vapor concentrations ranging from 51 ppm to 7,087 ppm. Field screening of soil from 28 to 30 feet bgs yielded no sheen and low organic vapor detections. Sandstone may have been encountered at 30 feet bgs in the very tip of the drill casing.

Two soil samples were collected from boring B-5. One sample was collected from 17-18 feet bgs where the highest organic vapor detection was documented. A second soil sample was collected from the bottom of the boring at a depth of 30 feet in an effort to delineate the total depth of contamination at the boring location.

Laboratory analysis of the soil sample collected from 17-18 feet bgs contained mineral spirits at a concentration of 1,600 mg/kg which exceeded the MTCA Method A target cleanup level of 100 mg/kg. Benzene and toluene were not detected. Ethylbenzene, xylenes, and PERC were detected at concentrations below their respective Method A target cleanup levels. PERC was detected at a concentration of 0.021 below the Method A target cleanup level of 0.05 mg/kg (Table 2).

Laboratory analysis of a soil sample collected at 30 feet bgs did not contain detectable concentrations of mineral spirits, toluene, ethylbenzene, or xylenes. Benzene was detected at a concentration of 0.048 mg/kg, which exceeded the MTCA Method A target cleanup level of 0.03 mg/kg. PERC was detected at a concentration of 0.089, which exceeded the MTCA Method A target cleanup level of 0.05 mg/kg (Table 2).

The groundwater sample collected from boring B-5 contained mineral spirits at a concentration of 13,000 ug/L, which exceeded the MTCA Method A target cleanup level of 1,000 ug/L. Benzene was detected at a concentration of 28 ug/L, which exceeded the MTCA Method A cleanup level of 5 ug/L. Toluene, ethylbenzene, xylenes, and PERC were detected at

concentrations below their respective MTCA Method A target cleanup levels. PERC was detected at a concentration of 4.4 ug/L, below the Method A target cleanup level of 5 ug/L.

7.0 CONCLUSIONS

A site characterization investigation was conducted at the former Cascade Laundry and Cleaners Inc. property located at 205 Prospect Street in Bellingham, Washington. The site characterization was initiated following the discovery of soil contamination identified during a UST Site Assessment completed in October 2010. At the time of tank closure the soil adjacent to and beneath the tank was sampled and confirmed to contain concentration of gasoline range TPH, BTEX constituents and PERC which exceeded the MTCA Method A target cleanup levels.

Per the MTCA cleanup regulation, the release was investigated on January 24, 2011. Five soil borings were advanced at the site in the vicinity of the leaking UST. The borings were drilled to characterize the extent of the release to soil and groundwater at to determine the extent of the release site.

Petroleum contaminated soil was identified at each of the five soil boring locations. The investigation revealed that subsurface soil in the vicinity of the leaking UST is impacted with mineral spirits at concentrations which exceed the MTCA Method A target cleanup level. Subsurface soil at two of the boring locations (B-2 and B-5) contained PERC at concentrations which exceed the MTCA Method A target cleanup level.

Groundwater contamination was also identified at each of the boring locations. Groundwater samples collected from all five boring locations contained concentrations of mineral spirits which exceed the MTCA Method A target cleanup level. Groundwater samples collected from two of the boring locations (B-2 and B-3) contained PERC at concentrations which exceed the MTCA Method A target cleanup level.

Based on the analytical results from soil samples collected at boring locations B-3 and B-5, the PERC concentrations in soil appear to diminish at a depth of approximately 30 feet. PERC was not identified in soil or groundwater at concentrations exceeding the MTCA Method A cleanup level in boring B-1 which was located in the inferred downgradient direction from the release source, however mineral spirits were identified at concentrations exceeding the MTCA Method A cleanup level at that location. The total extent of the mineral spirits and PERC contamination at the site has not been determined.

8.0 LIMITATIONS

No site investigation can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Performance of this investigation by Whatcom Environmental Services, Inc. is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property.

The interpretation of subsurface soil and groundwater conditions is based on Whatcom Environmental's field observations and chemical analytical data collected from relatively widely spaced sampling locations at the site. It is possible that contamination exists beneath portions of the site that were not explored, sampled, or analyzed. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

This environmental report is based on conditions that existed at the time the investigation was performed and samples collected. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, ground instability, or groundwater fluctuations.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted environmental practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for use by Cascade Laundry and Cleaners, Inc. Whatcom Environmental prepares a report for the client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. This report was prepared for exclusive use by the client and its agents and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental. This report is not intended for use by others, and the information contained herein is not applicable to other sites. This report may be made available to regulatory agencies.

9.0 REFERENCES

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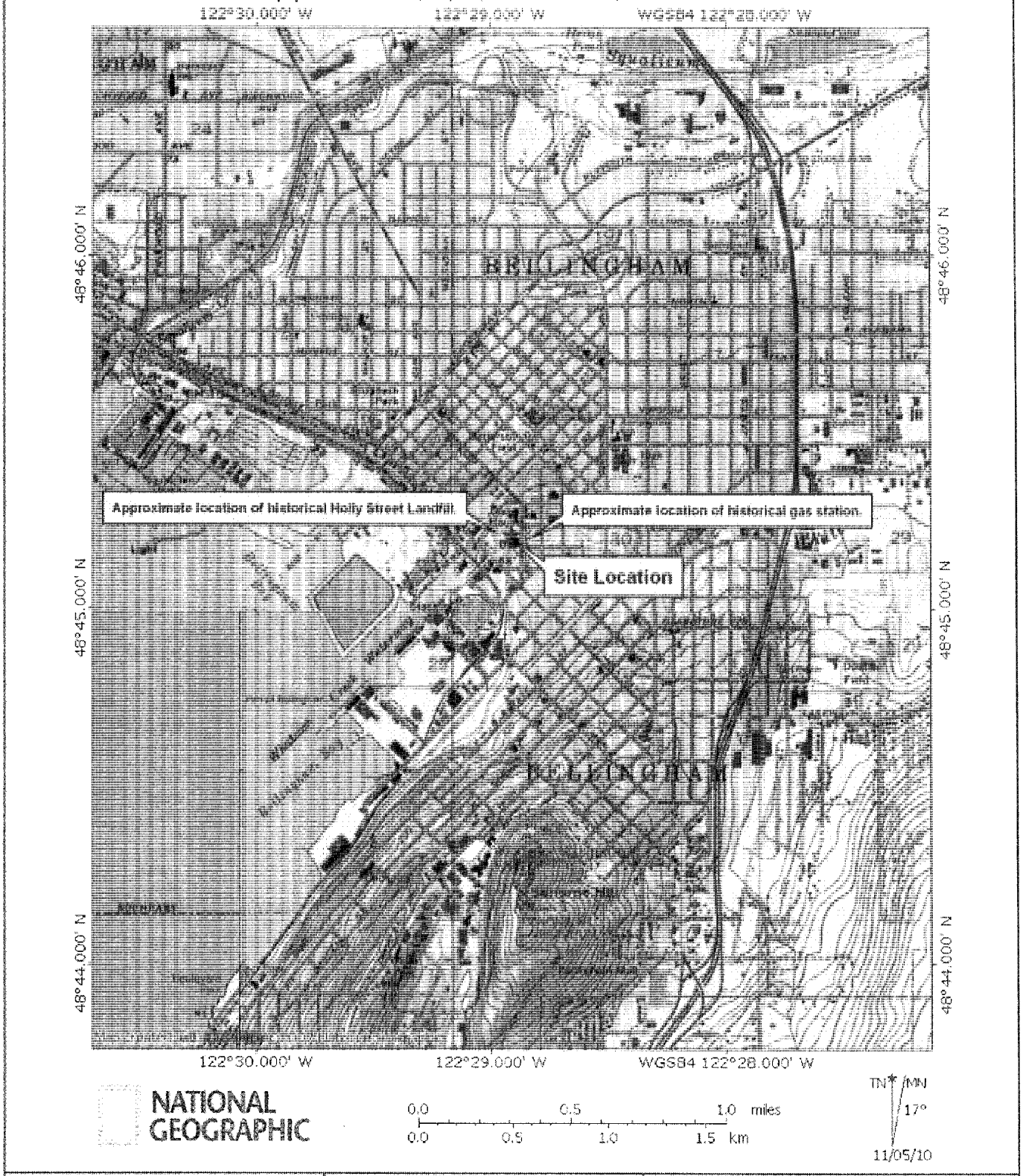
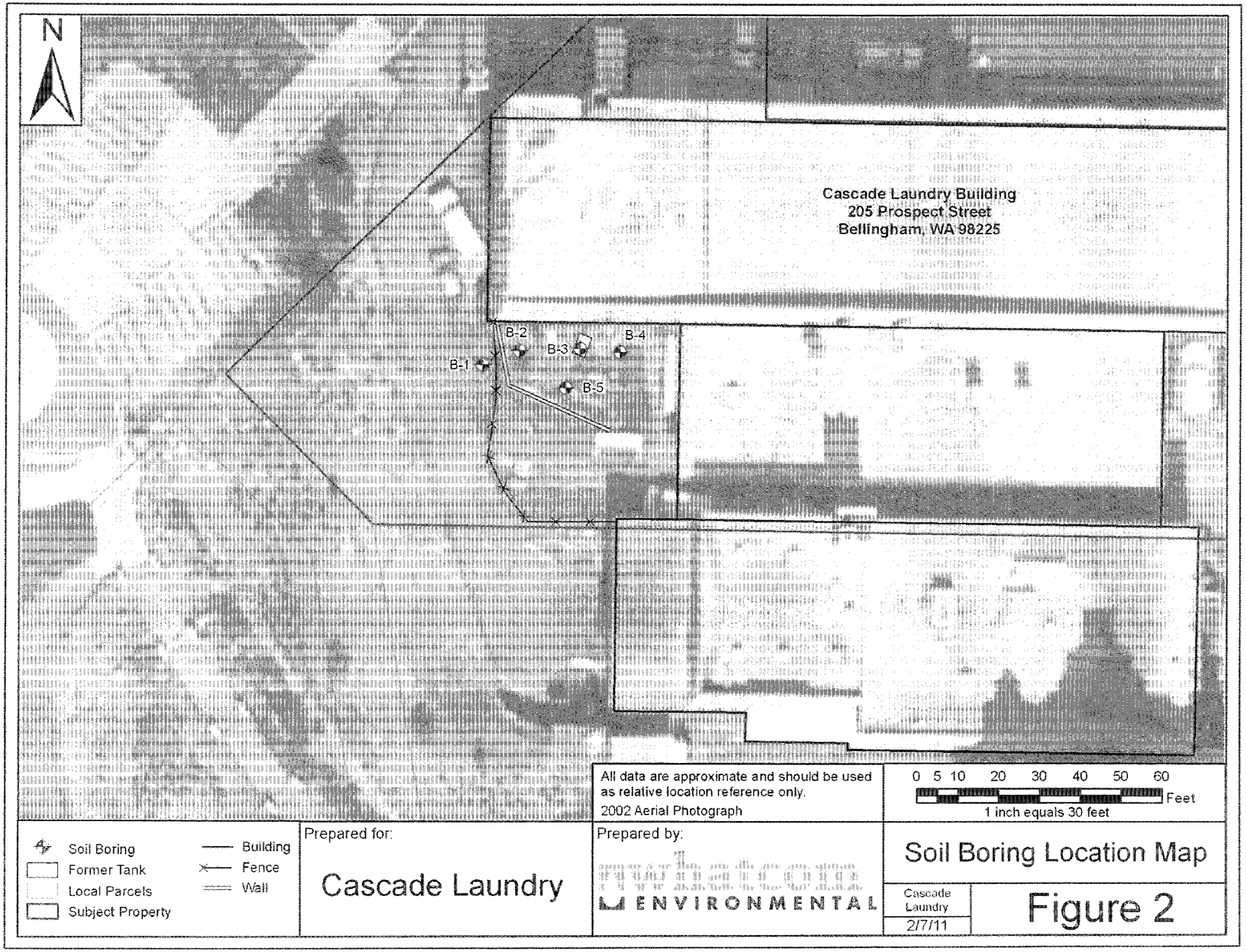


Prepared for:	Prepared by:	Site Location Map
Cascade Laundry	ENVIRONMENTAL	Cascade Laundry 11/5/10 — Figure 1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Cascade Laundry Building
205 Prospect Street
Bellingham, WA 98225
B-1
B-2
B-3
B-4
B-5
All data are approximate and should be used as relative location reference only.
2002 Aerial Photograph
0 5 10 20 30 40 50 60
Feet
1 inch equals 30 feet
Soil Boring
Former Tank
Local Parcels
Subject Property
Building
Fence
Wall
Prepared for:
Cascade Laundry
Prepared by:
ENVIRONMENTAL
Soil Boring Location Map
Cascade Laundry
2/7/11
Figure 2

Table 1. Soil Sample Descriptions - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	Depth (ft bgs)	Location and Description	Sheen Test	PID (ppm)
B-1 (17 to 18 ft)	1/24/2011	18	Bottom of boring approximately 20 feet west of tank pit. Silty clay with fine sand, gray to dark gray, plastic, sticky, wet	Moderate Sheen	1,705
B-2 (24 to 25 ft)	1/24/2011	25	Near bottom of boring approximately 12 feet west of tank pit. Fine sandy silt, gray, plastic, wet.	Moderate Sheen	7,451
B-3 (17 to 18 ft)	1/24/2011	18	17 feet below grade of boring drilled in tank pit. Silty sand, dark gray, loose, wet.	Heavy Sheen	6,388
B-3 (30 ft)	1/24/2011	30	Bottom of boring drilled in tank pit. Clay, gray, plastic, sticky, wet.	No Sheen	25
B-4 (14 to 15 ft)	1/24/2011	15	14 feet below grade approximately 10 feet east of tank pit. Clayey sand, dark gray, loose, wet.	Heavy Sheen	2,891
B-5 (17 to 18 ft)	1/24/2011	18	17 feet below grade approximately 8 feet south of tank pit. Fine sandy silt, dark gray, loose, wet.	Heavy Sheen	7,087
B-5 (30 ft)	1/24/2011	30	Bottom of boring approximately 8 feet south of tank pit. Clayey silt, olive gray, slightly plastic, moist.	No Sheen	17

Table 2. Soil Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	NWTPH-Gx Gasoline Range mg/kg	EPA-8021 Benzene mg/kg	EPA-8021 Toluene mg/kg	EPA-8021 Ethylbenzene mg/kg	EPA-8021 Xylenes mg/kg	EPA-8260 Tetrachloro-ethylene mg/kg
B-1 (17 to 18 ft)	1/24/2011	**1,500**	*ND(<0.60)*	ND(<1.0)	2.9	6.8	0.029
B-2 (24 to 25 ft)	1/24/2011	**1,200**	*ND(<0.60)*	ND(<1.0)	2.2	4.5	**45.0**
B-3 (17 to 18 ft)	1/24/2011	**1,300**	*ND(<0.60)*	ND(<1.0)	4.0	**9.4**	0.038
B-3 (30 ft)	1/24/2011	ND(<3.0)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.20)	0.024
B-4 (14 to 15 ft)	1/24/2011	**730**	*ND(<0.30)*	ND(<0.50)	1.0	2.0	ND(<0.01)
B-5 (17 to 18 ft)	1/24/2011	**1,600**	*ND(<0.60)*	ND(<1.0)	3.7	5.8	0.021
B-5 (30 ft)	1/24/2011	ND(<3.0)	**0.048**	ND(<0.05)	ND(<0.05)	ND(<0.20)	**0.089**
MTCA Method A Cleanup Levels		30/100*	0.03	7	6	9	0.05

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

Bold - Sample exceeded the MTCA Method A target cleanup level

Italicized - Reporting limit exceeds Method A target cleanup level

* cleanup level depends on BTEX concentration

NOTE: Lab reported that NWTPH-GX chromatograms indicate that the soil samples likely contain mineral spirits.

Table 3. Groundwater Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	NWTPH-Gx Gasoline Range (µg/L)	EPA-8021 Benzene (µg/L)	EPA-8021 Toluene (µg/L)	EPA-8021 Ethylbenzene (µg/L)	EPA-8021 Xylenes (µg/L)	EPA-8260 Tetrachloro-ethylene (µg/L)
B-1 Water (13-17 ft)	1/24/2011	**4,400**	ND(<5.0)	ND(<5.0)	36	44	ND(<2.0)
B-2 Water (26-30 ft)	1/24/2011	**13,000**	**21**	ND(<10.0)	66	97	**3,100**
B-3 Water (18-22 ft)	1/24/2011	**9,700**	**14**	26	180	360	**5.4**
B-4 Water (16-20 ft)	1/24/2011	**5,700**	**49**	11	55	55	3.9
B-5 Water (26-30 ft)	1/24/2011	**13,000**	**28**	51	200	340	4.4
MTCA Method A Cleanup Levels		800/1,000*	5	1,000	700	1,000	5

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

Bold - Sample exceeded the MTCA Method A target cleanup level

* cleanup level depends on BTEX concentration

NOTE: Lab reported that NWTPH-GX chromatograms indicate that the water samples likely contain mineral spirits.

APPENDIX A

Soil Boring Logs

Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: B-1
Location: West of tank outside retaining wall
Date Completed: 1/24/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Thomas Davis
First Encountered Water: 12 ft.
Total Depth: 20 ft.

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0 - 5' Hand excavated to clear boring location				
0 - 3' Silty fine sand with organics, brown to dark brown, moist to wet				
3' Rocky lense				
3 - 5' Fine sandy silt, tan, sticky, moist				
5 - 9' Fine sandy silt, dark brown, sticky, firm		0.0	NS	
9 - 9.5' Sand, tan, loose, moist		0.0	NS	
9.5 - 10' Silty clay, brown, firm, moist		0.0	NS	
10 - 15' Silty clay, gray, firm, wet		1,532	SS	
15 -16' Fine sand, dark gray, wet		1,705	MS	
16 - 20' Silty clay, minor fine sand, gray, sticky, plastic		1,705	MS	X

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Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: B-2
Location: West of tank pit inside retaining wall area
Date Completed: 1/24/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Thomas Davis
First Encountered Water: 16 ft.
Total Depth: 30 ft.

Depth/Description	Blow Count	FID* (ppm)	Sheen	Sample
0 - 5' Hand excavated to clear boring location. Sandy gravel with organics.				
5 - 10' Sand, brown, loose, moist			NS	
10 - 15' Clayey silt, brown, firm, moist			VSS	
15 - 20' Silty clay, gray, firm, moist to slightly wet			MS	
20 - 22' Silty fine sand, dark gray, loose, wet		4,500	MS	
22 - 24' Clay, gray, sticky, plastic		7,451	MS	
24 - 25' Fine sandy silt, dark gray, plastic, wet		7,451	MS	☒
25 - 30' Fine sandy silt, dark gray, plastic, wet		3,800	MS	

* Used FID instead of PID due to technical problems

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Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: B-3
Location: Center of former tank pit.
Date Completed: 1/24/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Thomas Davis
First Encountered Water: 17 ft.
Total Depth: 30 ft.

Depth/Description	Blow Count	FID (ppm)	Sheen	Sample
0 - 9' Tank pit backfill material. Sand and gravel.		0.0	NS	
10 - 11' Backfill, silty sand, tan and gray, wet		23	SS	
11 - 15' Clay, blue-gray, firm, moist		550	HS	
15 - 17' Silty clay, tan, firm, moist to wet		385	MS	
17 - 19' Silty sand, dark gray, loose, wet		6,388	HS	X
19 - 20' Clayey silt, blue-gray, firm, moist		530	MS	
20 - 22' Silty sand, gray, loose, wet		58	MS	
22 - 25' Silty clay, tan and gray, plastic, sticky		300	SS	
25 - 30' Clay, gray, plastic, sticky, wet		25	NS	X

WHATCOM ENVIRONMENTAL SERVICES INC.

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Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: B-4
Location: East of tank pit
Date Completed: 1/24/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Thomas Davis
First Encountered Water: 15 ft.
Total Depth: 20 ft.

Depth/Description		Blow Count	FID (ppm)	Sheen	Sample
0 - 5'	Hand excavated to clear boring location. Sand and gravel.		0.0	NS	
5 - 8'	Gravelly sand, brown, minor silt, firm, moist.		0.0	SS	
8 - 9'	Sand, dark gray, loose, wet		85	HS	
9 - 10'	Clay, blue-gray, hard, moist		200	MS	
10 - 13'	Clay, gray, hard, moist		50	SS	
13 - 14'	Clay, brown, hard, moist		50	SS	
14 - 15'	Clayey sand, dark gray, loose, wet		2,891	HS	X
15 - 17'	Clay, gray, hard, moist		50	NS	
17 - 20'	Clayey silt, tan, hard, moist		30	NS	

WHATCOM ENVIRONMENTAL SERVICES INC.

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Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: B-5
Location: South of tank pit
Date Completed: 1/24/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Thomas Davis
First Encountered Water: 16 ft.
Total Depth: 30 ft.

Depth	Description	Blow Count	FID (ppm)	Sheen	Sample
0 - 5'	Hand excavated to clear boring location. Silty sandy gravel, tan with brown to olive-brown		0.0	VSS	
5 - 8'	Sandy gravelly silt, brown and gray, firm, moist		7	VSS	
8 - 10'	Clayey silt, brown, firm, moist		17	SS	
10 - 13'	Clayey silt, brown, firm, moist		60	MS	
13 - 15'	Silty clay, olive-gray, firm, moist		6,130	MS	
15 - 16'	Silty clay, olive-gray, plastic, moist			MS	
16 - 18'	Fine sandy silt, dark gray, loose, wet		7,087	HS	X
18 - 20'	Clay, olive-gray, hard, moist		51	VSS	
20 - 24'	Clayey silt, olive-gray, soft, plastic, wet				
24 - 25'	Clayey silt with minor gravel, olive-brown, hard, moist				
25 - 28'	Clayey silt, olive-gray, slightly plastic, moist,		300	VSS	
28 - 30'	Clayey silt, olive-gray, slightly plastic, moist,		17	NS	X
30'	Appears to be sandstone in drill casing tip		0.0	NS	

WHATCOM ENVIRONMENTAL SERVICES INC.

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APPENDIX B

Soil Sample Analytical Data Report

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	2/1/2011
		ALS JOB#:	1101122
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 09:00
CLIENT SAMPLE ID	B-1 17 to 18ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1500**	60	20	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	U	0.60	20	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	1.0	20	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	**2.9**	1.0	20	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	**6.8**	4.0	20	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**29**	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**75.9 DS2**	01/27/2011	DLC
TFT 20X Dilution	EPA-8021	**131 DS2**	01/27/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**81.8**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**80.1**	01/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains mineral spirits.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -02
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 11:50
CLIENT SAMPLE ID	B-2 24 to 25ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1200**	60	20	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	U	0.60	20	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	1.0	20	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	**2.2**	1.0	20	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	**4.5**	4.0	20	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**45000**	1000	100	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**69.3 DS2**	01/27/2011	DLC
TFT 20X Dilution	EPA-8021	**125 DS2**	01/27/2011	DLC
1,2-Dichloroethane-d4 100X Dilution	EPA-8260	**89.0**	01/28/2011	GAP
4-Bromofluorobenzene 100X Dilution	EPA-8260	**103**	01/28/2011	GAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Laboratory Group A Campbell Brothers Limited Company
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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -03
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 13:00
CLIENT SAMPLE ID	B-3 17 to 18ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1300**	300	100	MG/KG	01/31/2011	DLC
Benzene	EPA-8021	U	0.60	20	MG/KG	01/31/2011	DLC
Toluene	EPA-8021	U	1.0	20	MG/KG	01/31/2011	DLC
Ethylbenzene	EPA-8021	**4.0**	1.0	20	MG/KG	01/31/2011	DLC
Xylenes	EPA-8021	**9.4**	4.0	20	MG/KG	01/31/2011	DLC
Tetrachloroethylene	EPA-8260	**38**	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 100X Dilution	NWTPH-GX	**197 DS2**	01/31/2011	DLC
TFT 20X Dilution	EPA-8021	**0 DS2**	01/31/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**79.4**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**60.3 GS1**	01/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
GS1 - Surrogate outside of control limits due to matrix effect.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -04
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 13:10
CLIENT SAMPLE ID	B-3 30ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	U	0.030	1	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**24**	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**86.1**	01/27/2011	DLC
TFT	EPA-8021	**76.7**	01/27/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**78.1**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**98.6**	01/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -05
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 14:10
CLIENT SAMPLE ID	B-4 14 to 15ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**730**	30	10	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	U	0.30	10	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	0.50	10	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	**1.0**	0.50	10	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	**2.0**	2.0	10	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**98.1 DS2**	01/27/2011	DLC
TFT 10X Dilution	EPA-8021	**118 DS2**	01/27/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**87.7**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**115**	01/28/2011	GAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -06
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 15:35
CLIENT SAMPLE ID	B-5 30ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	**0.048**	0.030	1	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**89**	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**92.7**	01/27/2011	DLC
TFT	EPA-8021	**80.5**	01/27/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**79.8**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**100**	01/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -07
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 15:45
CLIENT SAMPLE ID	B-5 17 to 18ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1600**	60	20	MG/KG	01/27/2011	DLC
Benzene	EPA-8021	U	0.60	20	MG/KG	01/27/2011	DLC
Toluene	EPA-8021	U	1.0	20	MG/KG	01/27/2011	DLC
Ethylbenzene	EPA-8021	**3.7**	1.0	20	MG/KG	01/27/2011	DLC
Xylenes	EPA-8021	**5.8**	4.0	20	MG/KG	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**21**	10	1	UG/KG	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**77.8 DS2**	01/27/2011	DLC
TFT 20X Dilution	EPA-8021	**136 DS2**	01/27/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**96.2**	01/28/2011	GAP
4-Bromofluorobenzene	EPA-8260	**120**	01/28/2011	GAP

DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Laboratory Group
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.alsenviro.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1101122

Date 1/26/11 Page 1 Of 2

PROJECT ID: Concrete Laundry
REPORT TO COMPANY: Whatcom Env. Svcs
PROJECT MANAGER: Harold Thom
ADDRESS: 928 E. Champion #101
Bham, WA 98225
PHONE: FAX:
PO. NUMBER: E-MAIL:
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

LABORATORY COPY

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): Perc by EPA 8260	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-1 17 to 18 ft	1-24-11	900	Soil	1			X	X												X	4	
2. B-2 24 to 25 ft		1150		2			X	X												X	4	
3. B-3 17 to 18 ft		1300		3			X	X												X	4	
4. B-3 30 ft		1310		4			X	X												X	4	
5. B-4 14 to 15 ft		1410		5			X	X												X	4	
6. B-5 30 ft		1535		6			X	X												X	4	
7. B-5 17 to 18 ft		1545		7			X	X												X	4	
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS: Samples collected via SOSSA

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: WES 1/26/11 1715
Received By:
2. Relinquished By:
Received By: Shawn Robinson ALS 1/27/11 8:30

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: X 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: X Standard | 3 | 1 | SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

APPENDIX C

Groundwater Sample Analytical Data Report

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -08
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 09:15
CLIENT SAMPLE ID	B-1 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**4400**	1000	20	UG/L	01/27/2011	DLC
Benzene	EPA-8021	U	5.0	5	UG/L	01/28/2011	DLC
Toluene	EPA-8021	U	5.0	5	UG/L	01/28/2011	DLC
Ethylbenzene	EPA-8021	**36**	5.0	5	UG/L	01/28/2011	DLC
Xylenes	EPA-8021	**44**	15	5	UG/L	01/28/2011	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	01/27/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**101**	01/27/2011	DLC
TFT 5X Dilution	EPA-8021	**82.3**	01/28/2011	DLC
1,2-Dichloroethane-d4	EPA-8260	**98.6**	01/27/2011	GAP
4-Bromofluorobenzene	EPA-8260	**220 GS1**	01/27/2011	GAP

GS1 - Surrogate outside of control limits due to matrix effect.
U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains mineral spirits.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -09
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 11:15
CLIENT SAMPLE ID	B-2 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**13000**	500	10	UG/L	01/27/2011	DLC
Benzene	EPA-8021	**21**	10	10	UG/L	01/27/2011	DLC
Toluene	EPA-8021	U	10	10	UG/L	01/27/2011	DLC
Ethylbenzene	EPA-8021	**66**	10	10	UG/L	01/27/2011	DLC
Xylenes	EPA-8021	**97**	30	10	UG/L	01/27/2011	DLC
Tetrachloroethylene	EPA-8260	**3100**	23	1000	UG/L	01/27/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**106**	01/27/2011	DLC
TFT 10X Dilution	EPA-8021	**95.5**	01/27/2011	DLC
1,2-Dichloroethane-d4 1000X Dilution	EPA-8260	**75.6**	01/27/2011	GAP
4-Bromofluorobenzene 1000X Dilution	EPA-8260	**97.8**	01/27/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -10
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 13:25
CLIENT SAMPLE ID	B-3 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**9700**	1000	20	UG/L	01/28/2011	DLC
Benzene	EPA-8021	**14**	10	10	UG/L	01/28/2011	DLC
Toluene	EPA-8021	**26**	10	10	UG/L	01/28/2011	DLC
Ethylbenzene	EPA-8021	**180**	10	10	UG/L	01/28/2011	DLC
Xylenes	EPA-8021	**360**	30	10	UG/L	01/28/2011	DLC
Tetrachloroethylene	EPA-8260	**5.4**	2.0	10	UG/L	01/27/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**95.5**	01/28/2011	DLC
TFT 10X Dilution	EPA-8021	**93.2**	01/28/2011	DLC
1,2-Dichloroethane-d4 10X Dilution	EPA-8260	**81.7**	01/27/2011	GAP
4-Bromofluorobenzene 10X Dilution	EPA-8260	**77.9 GS1**	01/27/2011	GAP

GS1 - Surrogate outside of control limits due to matrix effect.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -11
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 14:20
CLIENT SAMPLE ID	B-4 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**5700**	500	10	UG/L	01/28/2011	DLC
Benzene	EPA-8021	**49**	10	10	UG/L	01/28/2011	DLC
Toluene	EPA-8021	**11**	10	10	UG/L	01/28/2011	DLC
Ethylbenzene	EPA-8021	**55**	10	10	UG/L	01/28/2011	DLC
Xylenes	EPA-8021	**55**	30	10	UG/L	01/28/2011	DLC
Tetrachloroethylene	EPA-8260	**3.9**	2.0	10	UG/L	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**104**	01/28/2011	DLC
TFT 10X Dilution	EPA-8021	**102**	01/28/2011	DLC
1,2-Dichloroethane-d4 10X Dilution	EPA-8260	**87.7**	01/28/2011	GAP
4-Bromofluorobenzene 10X Dilution	EPA-8260	**102**	01/28/2011	GAP

Chromatogram indicates that it is likely that sample contains mineral spirits.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	2/1/2011 1101122 -12
CLIENT CONTACT:	Harold Cashman / Thom Davis	DATE RECEIVED:	1/27/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	1/24/2011 16:00
CLIENT SAMPLE ID	B-5 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**13000**	500	10	UG/L	01/28/2011	DLC
Benzene	EPA-8021	**28**	10	10	UG/L	01/28/2011	DLC
Toluene	EPA-8021	**51**	10	10	UG/L	01/28/2011	DLC
Ethylbenzene	EPA-8021	**200**	10	10	UG/L	01/28/2011	DLC
Xylenes	EPA-8021	**340**	30	10	UG/L	01/28/2011	DLC
Tetrachloroethylene	EPA-8260	**4.4**	2.0	10	UG/L	01/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**101**	01/28/2011	DLC
TFT 10X Dilution	EPA-8021	**98.6**	01/28/2011	DLC
1,2-Dichloroethane-d4 10X Dilution	EPA-8260	**84.6**	01/28/2011	GAP
4-Bromofluorobenzene 10X Dilution	EPA-8260	**75.7 GS1**	01/28/2011	GAP

GS1 - Surrogate outside of control limits due to matrix effect.
Chromatogram indicates that it is likely that sample contains mineral spirits.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: WDOE ACCREDITATION:	2/1/2011 1101122 C601
CLIENT CONTACT:	Harold Cashman / Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY BLANK RESULTS

MBG-012511S

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	01/25/2011	DLC

MBG-012511W

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	01/25/2011	DLC

MB-012511S

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	01/25/2011	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	01/25/2011	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	01/25/2011	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	01/25/2011	DLC

MB-012511W

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	01/25/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	01/25/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	01/25/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	01/25/2011	DLC

MB-012411S

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	10	1	UG/KG	01/24/2011	GAP
Toluene	EPA-8260	U	10	1	UG/KG	01/24/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	01/24/2011	GAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: WDOE ACCREDITATION:	2/1/2011 1101122 C601
CLIENT CONTACT:	Harold Cashman / Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY BLANK RESULTS

MB-012711W

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	01/27/2011	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	01/27/2011	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	01/27/2011	GAP

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CLIENT CONTACT:	Harold Cashman / Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 1378 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	91.5			01/25/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	88.6	3		01/25/2011	DLC

ALS Test Batch ID: 1382 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	86.8			01/25/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	90.3	3		01/25/2011	DLC

ALS Test Batch ID: 1378 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	93.6			01/25/2011	DLC
Benzene - BSD	EPA-8021	89.1	4		01/25/2011	DLC
Toluene - BS	EPA-8021	94.7			01/25/2011	DLC
Toluene - BSD	EPA-8021	90.0	5		01/25/2011	DLC
Ethylbenzene - BS	EPA-8021	91.2			01/25/2011	DLC
Ethylbenzene - BSD	EPA-8021	86.4	5		01/25/2011	DLC
Xylenes - BS	EPA-8021	96.3			01/25/2011	DLC
Xylenes - BSD	EPA-8021	91.1	5		01/25/2011	DLC

ALS Test Batch ID: 1382 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	103			01/25/2011	DLC
Benzene - BSD	EPA-8021	104	0		01/25/2011	DLC
Toluene - BS	EPA-8021	101			01/25/2011	DLC
Toluene - BSD	EPA-8021	102	0		01/25/2011	DLC
Ethylbenzene - BS	EPA-8021	101			01/25/2011	DLC
Ethylbenzene - BSD	EPA-8021	101	0		01/25/2011	DLC
Xylenes - BS	EPA-8021	100			01/25/2011	DLC
Xylenes - BSD	EPA-8021	101	0		01/25/2011	DLC

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: WDOE ACCREDITATION:	2/1/2011 1101122 C601
CLIENT CONTACT:	Harold Cashman / Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 1383 - Soil by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**93.9**			01/24/2011	GAP
1,1-Dichloroethene - BSD	EPA-8260	**90.8**	3		01/25/2011	GAP
Toluene - BS	EPA-8260	**99.5**			01/24/2011	GAP
Toluene - BSD	EPA-8260	**101**	1		01/25/2011	GAP

ALS Test Batch ID: 1390 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	**110**			01/27/2011	GAP
1,1-Dichloroethene - BSD	EPA-8260	**118**	7		01/27/2011	GAP
Toluene - BS	EPA-8260	**110**			01/27/2011	GAP
Toluene - BSD	EPA-8260	**120**	9		01/27/2011	GAP

APPROVED BY

Laboratory Director

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ALS Laboratory Group A Campbell Brothers Limited Company

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8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.alsenviro.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 110122

Date 1/26/11 Page 2 Of 2

PROJECT ID: Cascade Laundry
REPORT TO COMPANY: Whatcom Env. Svcs
PROJECT MANAGER: Thom
ADDRESS: 225 E. Champion #101
Bham, WA 98225
PHONE: FAX:
P.O. NUMBER: E-MAIL:
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	Pb by EPA 8260	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-1 Water	1/24/11	915	Water	8			X	X												X	3	
2. B-2 Water		1115		9			X	X												X	2	
3. B-3 Water		1325		10			X	X												X	2	
4. B-4 Water		1420		11			X	X												X	2	
5. B-5 Water		1600		12			X	X												X	3	
6.																						
7.																						
8.																						
9.																						
10.																						

LABORATORY COPY

SPECIAL INSTRUCTIONS: Samples collected via SOP-A

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] WCS 1/26/11 1:15
Received By:
2. Relinquished By:
Received By: Shawn Robinson ALS 1/27/11 8:30

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: [X] Standard 10 | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: [X] Standard 3 | 1 | SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

SITE CHARACTERIZATION REPORT
BUILDING INTERIOR SOIL BORINGS
CASCADE LAUNDRY & CLEANERS, INC.
205 PROSPECT STREET
BELLINGHAM, WASHINGTON
FSID #21786898

prepared for:

Cascade Laundry and Cleaners, Inc.
205 Prospect Street
Bellingham, WA 98225

January 10, 2012

nwhatcom
ENVIRONMENTAL

soil | water | air
compliance consulting

228 East Champion Street, Suite 101, Bellingham, WA 98225
tel 360.752.9571 | **fax** 360.752.9573 | *www.whatcomenvironmental.com*

SITE CHARACTERIZATION REPORT
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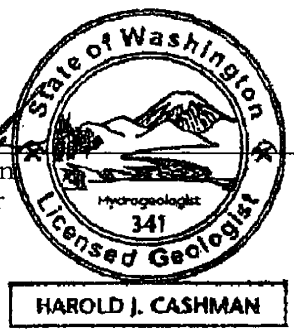
Prepared for

Cascade Laundry and Cleaners, Inc.
205 Prospect Street
Bellingham, WA 98225

Prepared by

Whatcom Environmental Services
228 East Champion Street #101
Bellingham, Washington 98225

January 10, 2012



Harold Cashman
Project Manager

Thomas Davis
QA/QC Reviewer

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1.0 INTRODUCTION

Additional site characterization work was conducted at 205 Prospect Street in Bellingham, Washington on December 20, 2011. The Cascade Laundry and Cleaners Inc. (client) site location is shown on Figure 1. Four soil borings were drilled within the building interior to evaluate the soil and groundwater conditions beneath the building footprint at the locations shown on Figure 2. Soil samples were collected from each boring location. Groundwater samples were collected from three of the four borings. The results of the December 2011 site characterization work are presented in this report.

A release of petroleum products to soil was discovered at on October 13, 2010 during an underground storage tank (UST) site assessment. Field screening observations and laboratory analytical results confirmed that gasoline range total petroleum hydrocarbons (TPH), xylenes, and tetrachloroethylene (PERC) were released to soil surrounding the tank at concentrations which exceeded the Model Toxics Control Act (MTCA) Method A target cleanup levels. A UST Site Assessment report was prepared for the client by Whatcom Environmental Services on November 8, 2010.

A site characterization was conducted at the site on January 24, 2011. Five soil borings were advanced in the vicinity of the former UST tank pit to characterize the extent of the release to soil and groundwater at the locations shown on Figure 2. Concentrations of gasoline range TPH (mineral spirits) exceeding the MTCA Method A cleanup level were found in soil samples collected at depths ranging from 14 to 25 feet and in all water samples collected. A Site Characterization report was prepared for the client by Whatcom Environmental Services on March 15, 2011.

2.0 SITE DESCRIPTION

The site is located at 205 Prospect Street in Bellingham, Washington as shown on Figure 1. The property is located in the downtown portion of Bellingham in the northwest quarter of the southwest quarter of Section 30, Township 38N, Range 3E. The site is located in an area zoned Commercial and is currently vacant.

2.1 Site Topography and Surrounding Area

The subject property is located approximately 0.1 miles northeast of the mouth of Whatcom Creek and has a median elevation of 60 feet above mean sea level. The majority of the property is level; however the western portion of the property slopes downward slightly towards the west. The site is located on a bluff which slopes down to the west towards the former Holly Street Landfill (FSID#: 2925). A site location map is provided as Figure 1.

2.2 Site Geology

The subject property is located in the northern portion of the Puget Sound Basin. The region is characterized by thick sequences of Pleistocene glacial advance outwash and meltwater deposits that were deposited on a basement of tectonically deformed ancient sedimentary and metamorphic bedrock. The glacial deposits have been reworked by more recent fluvial, lacustrine, and aeolian actions into the landforms present today.

The property is underlain by Bellingham Glaciomarine drift which consists of moderately sorted to unsorted diamicton with lenses and discontinuous beds of moderately to well-sorted gravel, sand, silt, and clay. Bedding is massive to poorly stratified. Color is blue-gray to olive-gray depending on oxidation state. Thickness ranges to as much as 90 meters. The unit is consistently firm to plastic, depending on moisture content. The unit is predominantly dry to slightly moist (WSDNR, 2000). The unit acts as an aquitard, impeding vertical migration of contaminants.

Field evidence supports the published interpretation of geology at the subject property. The depth to bedrock in each boring was approximately 27-29 feet bgs which indicates that the diamicton is approximately 25 to 30 feet thick at the site.

2.3 Site Hydrogeology

The depth to groundwater at the site on the day the soil borings were drilled ranged from 12 to 14 feet below ground surface. Groundwater was encountered in sand lenses interbeded in saturated silty clay at depths below approximately 12 to 14 feet. The diamicton became fully saturated and plastic at an approximate depth of 20 feet bgs in each of the four borings. Based on the site topography, the groundwater flow direction is assumed to flow to the west.

3.0 INVESTIGATIVE METHODS

Four soil borings were drilled by Cascade Drilling using a direct-push hydraulic and percussion drive-point sampling system on December 20, 2011. The soil borings were drilled inside the building at the locations shown on Figure 2.

Subsurface utilities were located prior to drilling. The drill rig equipment was decontaminated prior to drilling each test hole. The borings were continuously cored to depths ranging from 27 to 29 feet below grade where bedrock was encountered. Soil cores were logged in the field and soil descriptions generally followed ASTM D 2487 'Unified Soil Classification System' procedures for description and identification of soils. The soil cores were evaluated for organic vapors using a photoionization detector (PID) and for petroleum products using sheen tests. The test holes were backfilled to the surface using bentonite-based grout materials specified in WAC 173-160. Soil boring logs are included in Appendix A.

Immediately after the soil cores were described a portion of the sample was sheen tested and the remainder of the sample was placed in labeled re-sealable bags. Sheen test results were recorded as NS – no sheen, VSS – very slight sheen, SS – slight sheen, MS – moderate sheen, and HS – heavy sheen. The PID was inserted into the re-sealable bag in order to evaluate the presence of organic vapors, and a headspace reading was measured and organic vapor detections in parts per million (ppm) were recorded on the borelogs. Results from the sheen tests and PID measurements are summarized in Table 1 and on the borelogs in Appendix A.

Soil samples were collected for laboratory analysis from each soil boring at depths determined based on field screening results. If field screening did not indicate the presence of contamination in a boring, a sample was generally collected in relation to the depth where water was first encountered. Five soil samples were chosen for analysis from the four soil boring locations. Soil samples were analyzed for gasoline range TPH, BTEX constituents and PERC. All soil samples were collected using EPA Method 5035A. Soil sample descriptions, including field screening results and sample depths, are presented in Table 1. A summary of the soil sample laboratory analytical data are presented in Table 2. The original soil sample analytical data reports included in Appendix B.

Groundwater samples were collected from each boring location with the exception of boring B-8, which did not yield enough water to allow for sample collection. The groundwater

samples were collected though slotted PVC well screens inserted into the open boreholes. A peristaltic pump and polyethylene tubing were used to collect the samples. Groundwater samples were collected for laboratory analysis for gasoline range TPH, BTEX constituents and PERC. A summary of the groundwater sample laboratory analytical data are presented in Table 3. The original laboratory sample analytical data reports are included in Appendix C.

4.0 SOIL AND GROUNDWATER SCREENING LEVELS

Based on the historical use of the site as dry cleaning and laundry facility, soil and water samples collected from the site were analyzed for gasoline range TPH using Method NWTPH-Gx, BTEX constituents using EPA Method 8021, and PERC using EPA Method 8260.

The soil screening levels for the site were established for unrestricted land use in accordance with the Model Toxics Control Act (MTCA) WAC 173-340. MTCA Method A target cleanup levels are provided in WAC 173-340, Table 740-1.

The water screening levels for the site were established for unrestricted land use in accordance with the Model Toxics Control Act (MTCA) WAC 173-340. MTCA Method A water target cleanup levels are provided in WAC 173-340, Table 720-1.

The soil and water data were compared to the applicable MTCA Method A concentrations. MTCA Method A target cleanup levels for soil are shown on Table 2 and MTCA Method A target cleanup levels for water are shown on Table 3.

5.0 INVESTIGATION FINDINGS

The information gathered during the subsurface investigation described herein indicates that soil at one of the four boring locations (B-6) and groundwater at two boring locations (B-6 and B-7) contained concentrations of gasoline range TPH, BTEX constituents, and/or tetrachloroethylene (PERC) which exceeded the applicable MTCA Method A cleanup levels. A laboratory analytical data summary map is provided on Figure 3.

5.1 Boring B-6

Soil boring B-6 was drilled at the location shown on Figure 2. Field screening results from soil cores extracted from the boring are included on the B-6 boring log included in Appendix A. Two soil samples and one groundwater sample were collected for laboratory analysis from soil boring B-6.

Laboratory analysis of the soil sample collected from 14.5-15 feet in boring B-6 confirmed the presence of gasoline range TPH at a concentration of 870 mg/kg which exceeded the MTCA Method A target cleanup level of 30 mg/kg. Three of four BTEX constituents were also detected at concentrations exceeding the MTCA Method A target cleanup levels (Table 2). PERC was not detected in the sample.

Laboratory analysis of the soil sample collected from 28.5-29 feet in boring B-6 did not detect the presence of gasoline range TPH, BTEX constituents, or PERC.

The groundwater sample collected from boring B-6 contained benzene at a concentration of 22 ug/L which exceeded the MTCA Method A cleanup level of 5 ug/L. PERC was detected in the water sample at a concentration of 5.9 ug/L which exceeded the MTCA Method A cleanup level of 5 ug/L (Table 3). Gasoline range TPH was detected at a concentration of 320 ug/L, which did not exceed the MTCA Method A target cleanup level of 800 ug/L. Toluene, ethylbenzene, and xylenes were detected at low concentrations which did not exceed the applicable MTCA Method A cleanup levels.

5.2 Boring B-7

Soil boring B-7 was drilled at the location shown on Figure 2. Field screening results from soil cores extracted from the boring are included on the B-7 boring log included in Appendix A. One soil sample and one groundwater sample were collected for laboratory analysis from soil boring B-7.

Field screening results did not indicate the presence of petroleum compounds in the soil to the full depth of the boring. Laboratory analysis of the soil sample collected from 19-19.5 feet in boring B-7 did not detect the presence of TPH, BTEX constituents, or PERC (Table 2).

The groundwater sample collected from boring B-7 contained PERC at a concentration of 13 ug/L, which exceeded the MTCA Method A target cleanup level of 5 ug/L (Table 3). Toluene was detected at a concentration of 2.3 ug/L, which did not exceed the MTCA Method A cleanup level. Gasoline range TPH, benzene, ethylbenzene, and xylenes were not detected (Table 3).

5.3 Boring B-8

Soil boring B-8 was drilled at the location shown on Figure 2. Field screening results from soil cores extracted from the boring are included on the B-8 boring log included in Appendix A. One soil sample was collected for laboratory analysis from soil boring B-8. No groundwater sample was collected from boring B-8, due to a lack of groundwater at that boring location.

Field screening results did not detect the presence of petroleum compounds in the soil to the full depth of the boring. Laboratory analysis of the soil sample collected from 12-12.5 feet in boring B-8 indicated that PERC was present in the soil at a concentration of 0.012 mg/kg which was below the MTCA Method A target cleanup level of 0.05 mg/kg (Table 2). Gasoline range TPH and BTEX constituents were not detected.

5.4 Boring B-9

Soil boring B-9 was drilled at the location shown on Figure 2. Field screening results from soil cores extracted from the boring are included on the B-9 boring log included in Appendix A. One soil sample and one groundwater sample were collected for laboratory analysis from soil boring B-9.

Field screening results did not indicate the presence of petroleum compounds in the soil to the full depth of the boring. Laboratory analysis of the soil sample collected from 15.5-16 feet in boring B-9 did not detect the presence of TPH, BTEX constituents, or PERC (Table 2).

The groundwater sample collected from boring B-9 contained toluene at a concentration of 1.0 ug/L, which did not exceed the MTCA Method A cleanup level. Gasoline range TPH, benzene, ethylbenzene, xylenes, and PERC were not detected (Table 3).

6.0 CONCLUSIONS

Additional site characterization work was conducted in December 2011 at the Cascade Laundry and Cleaners Inc. property to evaluate the soil and groundwater conditions beneath a portion of the building footprint. Based on the analytical results from samples collected at the site, soil and groundwater contamination at concentrations which exceeded the MTCA Method A cleanup levels were identified beneath the southwest corner of the building.

Gasoline range TPH and BTEX constituents were identified at concentrations which exceeded the MTCA Method A cleanup levels in a soil sample collected from boring B-6 at a depth of 14.5-15 feet.

PERC was identified in groundwater at concentrations which exceeded the MTCA Method A cleanup level in the water samples collected from borings B-6 and B-7.

7.0 LIMITATIONS

No site investigation can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Performance of this investigation by Whatcom Environmental Services, Inc. is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property.

The interpretation of subsurface soil and groundwater conditions is based on Whatcom Environmental's field observations and chemical analytical data collected from relatively widely spaced sampling locations at the site. It is possible that contamination exists beneath portions of the site that were not explored, sampled, or analyzed. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

This environmental report is based on conditions that existed at the time the investigation was performed and samples collected. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, ground instability, or groundwater fluctuations.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted environmental practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for use by Cascade Laundry and Cleaners, Inc. Whatcom Environmental prepares a report for the client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. This report was prepared for exclusive use by the client and its agents and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental. This report is not intended for use by others, and the information contained herein is not applicable to other sites. This report may be made available to regulatory agencies.

8.0 REFERENCES

Cascade Laundry and Cleaners, Inc. November 8, 2010. Underground Storage Tank Site Assessment at Closure – Cascade Laundry Facility, 205 Prospect Street, Bellingham, Washington (FSID# 21786898).

Cascade Laundry and Cleaners, Inc. March 15, 2011. Site Characterization Report: Cascade Laundry & Cleaners, Inc., 205 Prospect Street, Bellingham, Washington, FSID #21786898.

U.S. Department of Agriculture (USDA). 1992. Soil Survey of Whatcom County Area, Washington. Soil Conservation Service. 481 pp.

Washington State Department of Ecology (Ecology). 1994. Guidance on Preparing Independent Remedial Action Reports Under the Model Toxics Control Act Chapter 70.105D RCW, Working Draft, Publication No. 94-18. March 9, 1994.

Washington State Department of Ecology (Ecology). 2001. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06. February 12, 2001.

Washington State Department of Natural Resources (WADNR). 2000. Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington. Open File Report 2000-5.

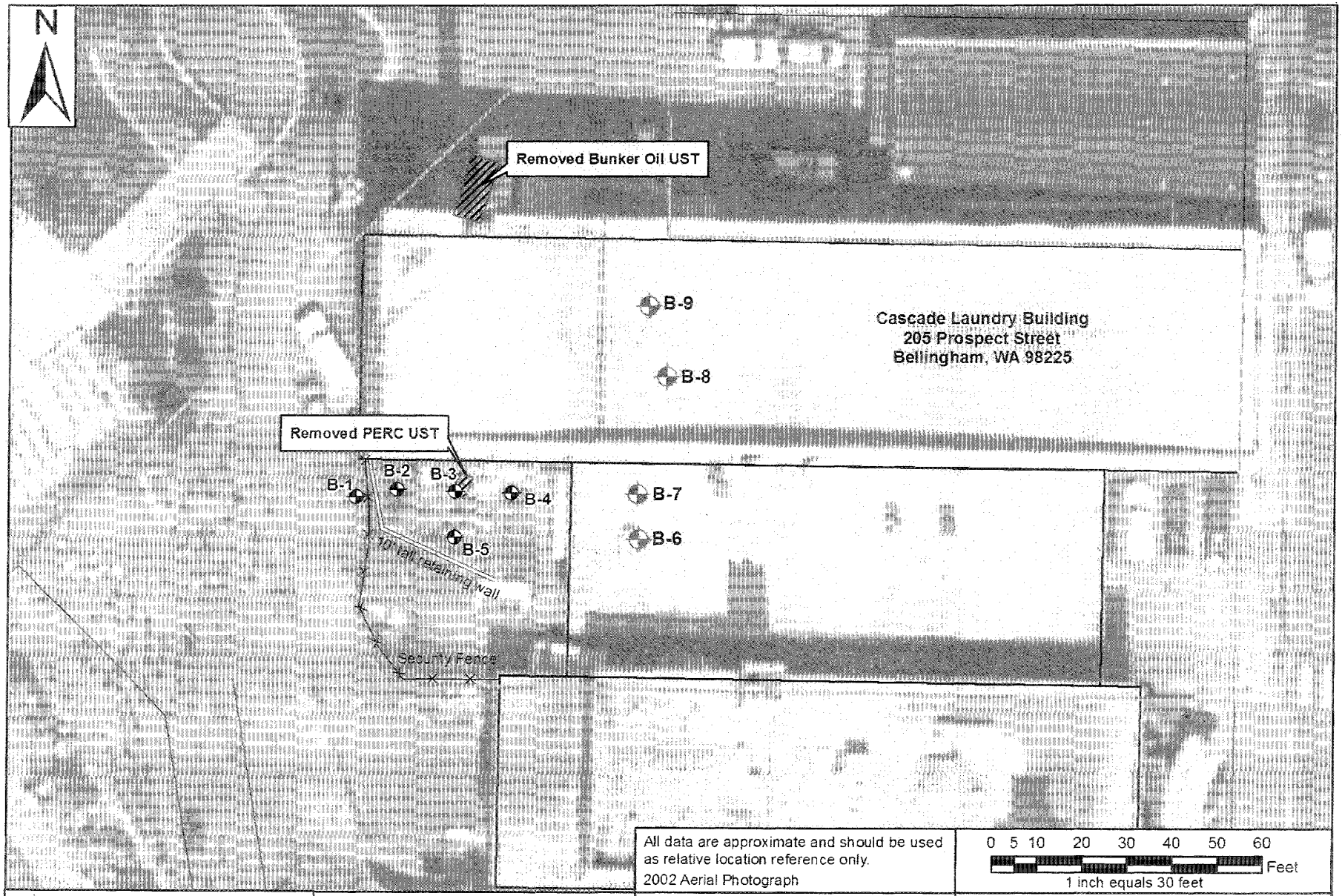
TOPO! map printed on 11/05/10, 48°45.202' N, 122°28.912' W WGS84

NATIONAL GEOGRAPHIC

0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TN 17° MN
11/05/10

Prepared for:	Prepared by:	
Cascade Laundry	ENVIRONMENTAL	Site Location Map
	Cascade Laundry 11/5/10	Figure 1



All data are approximate and should be used as relative location reference only.
2002 Aerial Photograph

0 5 10 20 30 40 50 60 Feet
1 inch equals 30 feet

2011 Interior Soil Borings
2011 Exterior Soil Borings
Subject Property
Removed Tank Locations

Prepared for:

Cascade Laundry

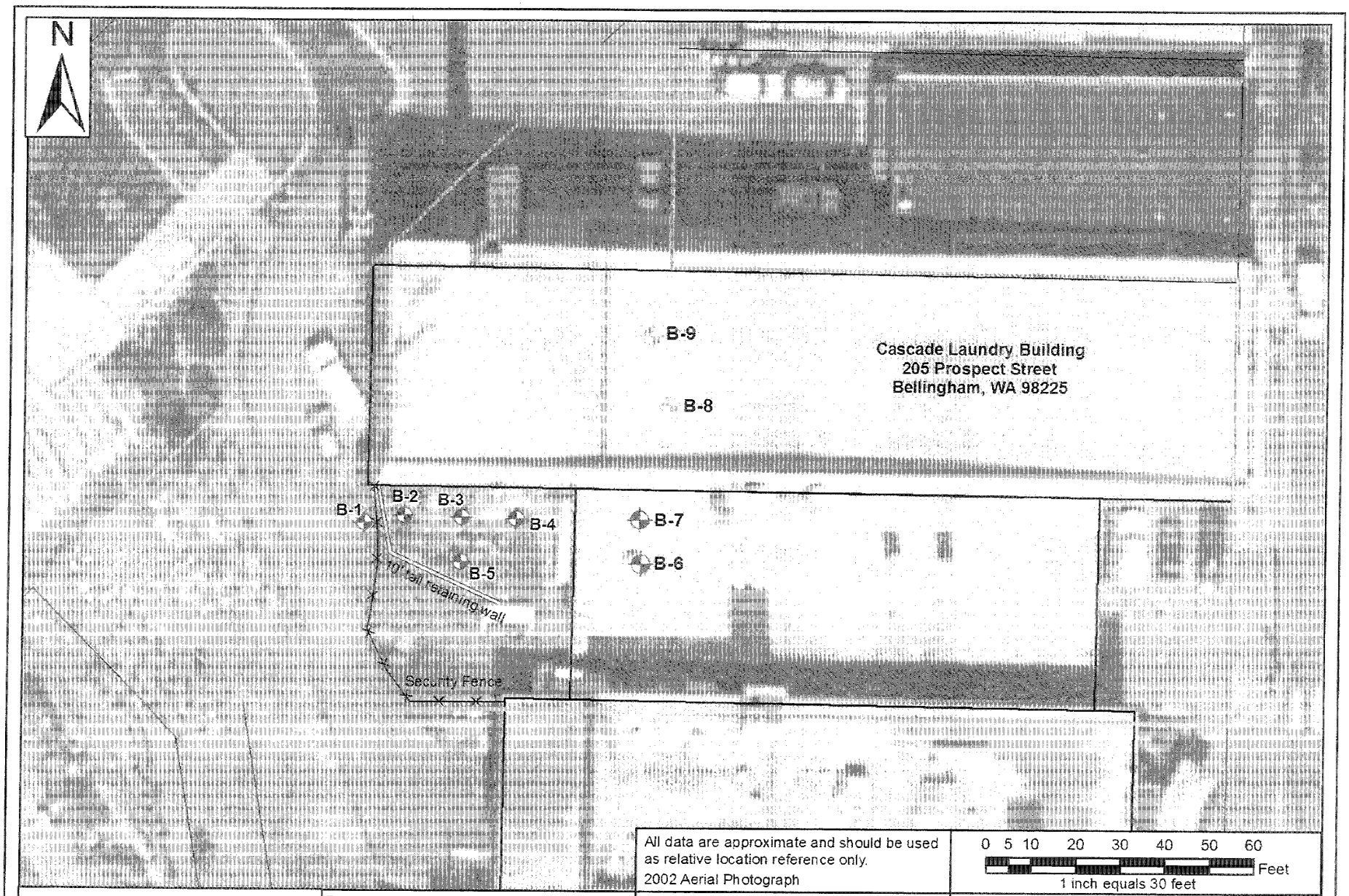
Prepared by:

ENVIRONMENTAL

Soil Boring Location Map

Cascade Laundry
12/30/2011

Figure 2



All data are approximate and should be used as relative location reference only.
2002 Aerial Photograph

0 5 10 20 30 40 50 60 Feet
1 inch equals 30 feet

Meets MTCA Method A
Exceeds MTCA Method A
Subject Property

Prepared for:
Cascade Laundry

Prepared by:
ENVIRONMENTAL

Laboratory Analytical Data Summary Map

Cascade Laundry
1/6/2012

Figure 3

Table 1. Soil Sample Descriptions - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	Depth (ft bgs)	Location and Description	Sheen Test	PID (ppm)
B-6 14.5-15ft	12/20/2011	14.5-15	Silty clay, brown/gray, plastic, slightly wet Collected from boring B-6 at a depth of 14.5 to 15 feet bgs.	VSS	640
B-6 28.5-29ft	12/20/2011	28.5-29	Silty clay, minor gravel, brown, plastic, wet Collected from boring B-6 at a depth of 28.5 to 29 feet bgs.	NS	9
B-7 19-19.5ft	12/20/2011	19-19.5	Silty clay, minor gravel, gray, plastic, moist to slightly wet Collected from boring B-7 at a depth of 19 to 19.5 feet bgs.	NS	0.0
B-8 12-12.5ft	12/20/2011	12-12.5	Sandy silt, brown, loose, wet Collected from boring B-8 at a depth of 12 to 15.5 feet bgs.	NS	0.0
B-9 15.5-16ft	12/20/2011	15.5-16	Clayey silt, minor gravel, brown, plastic, wet Collected from boring B-9 at a depth of 15.5 to 16 feet bgs.	NS	0.0

NS - No Sheen

VSS - Very Slight Sheen

Table 2. Soil Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	NWTPH-Gx Gasoline Range mg/kg	EPA-8021 Benzene mg/kg	EPA-8021 Toluene mg/kg	EPA-8021 Ethylbenzene mg/kg	EPA-8021 Xylenes mg/kg	EPA-8260 Tetrachloro-ethylene mg/kg
B-6 14.5-15ft	12/20/2011	**870**	**7.2**	2.1	**16**	**16**	ND(<0.01)
B-6 28.5-29ft	12/20/2011	ND(<3)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.01)
B-7 19-19.5ft	12/20/2011	ND(<3)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.01)
B-8 12-12.5ft	12/20/2011	ND(<3)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	0.012
B-9 15.5-16ft	12/20/2011	ND(<3)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.01)
MTCA Method A Cleanup Levels		30/100*	0.03	7	6	9	0.05

Bold - Sample exceeded the MTCA Method A target cleanup level

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

* cleanup level depends on BTEX concentration

Table 3. Groundwater Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA

Sample ID	Date	NWTPH-Gx Gasoline Range (µg/L)	EPA-8021 Benzene (µg/L)	EPA-8021 Toluene (µg/L)	EPA-8021 Ethylbenzene (µg/L)	EPA-8021 Xylenes (µg/L)	EPA-8260 Tetrachloro-ethylene (µg/L)
B-6 Water	12/20/2011	320	**22**	3.9	18	8.2	**5.9**
B-7 Water	12/20/2011	ND(<50)	ND(<1.0)	2.3	ND(<1.0)	ND(<3.0)	**13**
B-9 Water	12/20/2011	ND(<50)	ND(<1.0)	1.0	ND(<1.0)	ND(<3.0)	ND(<2.0)
MTCA Method A Cleanup Levels		800/1,000*	5	1,000	700	1,000	5

ND- indicates analyte was not detected at level above reporting limit (shown in parentheses)

Bold - Sample exceeded the MTCA Method A target cleanup level

* cleanup level depends on BTEX concentration

APPENDIX A

Soil Boring Logs

Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: **B-6**
Location: South boring inside building
Date Completed: 12/20/2011

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: T. Davis
First Encountered Water: ~13.5 ft
Total Depth: 29 ft

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-5' Pre cleared		0.0	NS	
Organics at top 2-3 feet, brown clayey silt below				
5-10' Clayey silt, brown, firm, dry		0.0	NS	
10-12.5' Clayey silt, brown, firm, dry		17	VSS	
12.5-13.5' Silty clay, gray, plastic, moist to slightly wet		350	VSS	
13.5-15' Silty clay, brown, plastic, slightly wet		499	VSS	14.5-15'
15-18.5' Silty clay, brown, plastic, slightly wet				
15'		320	VSS	
16'		49	NS	
17'		50	NS	
18'		15	NS	
18.5-20' Silty clay, gray, firm, moist				
19'		11	NS	
20'		7	NS	
20-25' Silty clay, gray, plastic, wet		0.0	NS	
25-26.5' Silty clay, gray, plastic, wet		142	VSS	
26-27.5' Silty clay, fractured, brown, saturated, wet		111	NS	
27.5-29' Silty clay, minor gravel, brown, plastic wet		9	NS	28-29'
Bedrock at 29 feet				

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: **B-7**
Location: South middle boring inside building
Date Completed: 12/20/2011

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: T. Davis
First Encountered Water: ~12.5 ft
Total Depth: 29 ft

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-5'	Pre cleared Clayey silt, minor mottling, brown, loose, moist		0.0	NS	
5-9'	Clayey silt, brown, firm, dry		0.0	NS	
9-10'	Silty clay, brown, firm, dry to moist		0.0	NS	
10-12'	Silty clay, brown, firm, moist		0.0	NS	
12-13'	Sandy silt, brown, firm, moist to slightly wet		0.0	NS	
13-14'	Clayey silt, brown, firm, moist		0.0	NS	
14-15'	Silty clay with minor gravel, brown, firm, fractures, moist		0.0	NS	
15-18.5'	Silty clay, brown, firm, moist		0.0	NS	
18.5-20'	Silty clay with minor gravel, gray, plastic, moist to slightly wet		0.0	NS	19-19.5'
20-25'	Silty clay with minor gravel, gray, plastic, wet		0.0	NS	
25-29'	Gravelly silty clay, plastic, wet		0.0	NS	
Bedrock at 29 feet					

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: **B-8**
Location: North middle boring inside building
Date Completed: 12/20/2011

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: T. Davis
First Encountered Water: Lens at 12 ft
Total Depth: 27 ft

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-5'	Pre-cleared Clayey silt, brown with minor orange mottling, plastic, moist		0.0	NS	
5-10'	Clayey silt, brown with minor mottling, firm, dry		0.0	NS	
10-12'	Clayey silt with minor gravel, brown, firm, moist		0.0	NS	
12-14'	Sandy silt, brown, loose, wet		0.0	NS	12-12.5'
14-15'	Clayey silt, brown, firm, moist		0.0	NS	
15-19'	Clayey silt with gravel, brown, firm, moist		0.0	NS	
19-20'	Clayey with minor gravel, gray, firm slightly moist		0.0	NS	
20-27'	Silty clay with minor gravel, gray, plastic, wet		0.0	NS	
~27'	Hit salt & pepper sandstone (chuckanut?)		0.0	NS	
Bedrock at 27 feet					

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: Cascade Laundry
Client: Cascade Laundry
Boring Number: **B-9**
Location: North boring inside building
Date Completed: 12/20/2011

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: T. Davis
First Encountered Water: ~14 ft
Total Depth: 27 ft

Depth	Description	Blow Count	PID (ppm)	Sheen	Sample
0-5'	Pre-cleared Clayey silt, brown, firm, moist		0.0	NS	
5-10'	Clayey silt, brown, firm, dry Moist at 9 ft		0.0	NS	
10-11'	Fine sandy silt, brown, firm, slightly wet		0.0	NS	
11-14'	Clayey silt, brown, firm, moist		0.0	NS	
14-15'	Clayey silt with minor gravel, brown, plastic, fractures, slightly wet		0.0	NS	
15-17.5'	Clayey silt with minor gravel, brown, plastic, wet		0.0	NS	15-16'
17.5-20'	Clayey silt with gravel, gray, firm, moist		0.0	NS	
20-25'	Silty clay with minor gravel, gray, plastic, slightly wet		0.0	NS	
25-27'	Silty clay, gray, plastic, wet		0.0	NS	
	Bedrock at approximately 27.5 feet				

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

APPENDIX B

Soil Sample Analytical Data Report

December 30, 2011

Mr. Harold Cashman
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Cashman,

On December 22nd, 5 samples were received by our laboratory and assigned our laboratory project number 1112141. The project was identified as your Cascade Laundry. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 PHONE 425-356-2600 FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company
www.alsglobal.com

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/30/2011
		ALS JOB#:	1112141
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 09:30
CLIENT SAMPLE ID	B-8 12 to 12.5 ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	12/22/2011	GAP
Benzene	EPA-8021	U	0.030	1	MG/KG	12/22/2011	GAP
Toluene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	**12**	10	1	UG/KG	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**57.6 GS1**	12/22/2011	GAP
TFT	EPA-8021	**72.6**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**94.3**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
GS1 - Surrogate outside of control limits due to matrix effect.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/30/2011 1112141 -02
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 11:00
CLIENT SAMPLE ID	B-9 15.5 to 16 ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	2.0	0.66	MG/KG	12/22/2011	GAP
Benzene	EPA-8021	U	0.027	0.66	MG/KG	12/22/2011	GAP
Toluene	EPA-8021	U	0.045	0.66	MG/KG	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	0.045	0.66	MG/KG	12/22/2011	GAP
Xylenes	EPA-8021	U	0.18	0.66	MG/KG	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 0.66X Dilution	NWTPH-GX	**58.7 GS1**	12/22/2011	GAP
TFT 0.66X Dilution	EPA-8021	**76.2**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**100**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
GS1 - Surrogate outside of control limits due to matrix effect.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/30/2011 1112141 -03
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 12:15
CLIENT SAMPLE ID	B-7 19 to 19.5 ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	12/22/2011	GAP
Benzene	EPA-8021	U	0.030	1	MG/KG	12/22/2011	GAP
Toluene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**62.0**	12/22/2011	GAP
TFT	EPA-8021	**74.4**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**97.4**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/30/2011 1112141 -04
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 14:30
CLIENT SAMPLE ID	B-6 14.5 to 15 ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**870**	300	100	MG/KG	12/22/2011	GAP
Benzene	EPA-8021	**7.2**	0.43	10	MG/KG	12/22/2011	GAP
Toluene	EPA-8021	**2.1**	0.71	10	MG/KG	12/22/2011	GAP
Ethylbenzene	EPA-8021	**16**	0.71	10	MG/KG	12/22/2011	GAP
Xylenes	EPA-8021	**16**	2.8	10	MG/KG	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 100X Dilution	NWTPH-GX	**2.44 DS2**	12/22/2011	GAP
TFT 10X Dilution	EPA-8021	**46.4 DS2**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**104**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/30/2011 1112141 -05
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 14:45
CLIENT SAMPLE ID	B-6 28.5 to 29 ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	12/22/2011	GAP
Benzene	EPA-8021	U	0.030	1	MG/KG	12/22/2011	GAP
Toluene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/22/2011	GAP
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**60.3**	12/22/2011	GAP
TFT	EPA-8021	**79.7**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**91.8**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS SDG#: WDOE ACCREDITATION:	12/30/2011 1112141 C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY BLANK RESULTS

MBG-121611S2 - Batch 2378 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	12/17/2011	DLC

MB-121611S2 - Batch 2378 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	12/17/2011	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	12/17/2011	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	12/17/2011	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	12/17/2011	DLC

MB-122911S - Batch 2404 - Soil by EPA-8260

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP
Toluene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP
Tetrachloroethylene	EPA-8260	U	10	1	UG/KG	12/29/2011	GAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS SDG#: WDOE ACCREDITATION:	12/30/2011 1112141 C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2378 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	73.3			12/17/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	78.0	6		12/17/2011	DLC

ALS Test Batch ID: 2378 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	107			12/19/2011	DLC
Benzene - BSD	EPA-8021	111	4		12/19/2011	DLC
Toluene - BS	EPA-8021	107			12/19/2011	DLC
Toluene - BSD	EPA-8021	110	3		12/19/2011	DLC
Ethylbenzene - BS	EPA-8021	103			12/19/2011	DLC
Ethylbenzene - BSD	EPA-8021	105	2		12/19/2011	DLC
Xylenes - BS	EPA-8021	108			12/19/2011	DLC
Xylenes - BSD	EPA-8021	111	3		12/19/2011	DLC

ALS Test Batch ID: 2404 - Soil by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	101			12/29/2011	GAP
1,1-Dichloroethene - BSD	EPA-8260	111	9		12/29/2011	GAP
Toluene - BS	EPA-8260	99.4			12/29/2011	GAP
Toluene - BSD	EPA-8260	105	6		12/29/2011	GAP

APPROVED BY

Laboratory Director

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ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
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(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1112141

Date 12-21-11 Page 1 Of 1

PROJECT ID: Cascade Laundry
REPORT TO COMPANY: Whatcom Env. Svcs.
PROJECT MANAGER: Harold
ADDRESS: 228 E. Champion #101
Bham, WA 98225
PHONE: 752-9571 FAX:
P.O. NUMBER: E-MAIL: hjcashman@...
INVOICE TO COMPANY:
ATTENTION: Same ↑
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify) PERC by EPA 8260	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-8 12 to 12.5 ft	12/20/11	930	Soil	1			X	X												X	4	
2. B-9 15.5 to 16 ft		1100		2			X	X												X	4	
3. B7 19 to 19.5 ft		1215		3			X	X												X	4	
4. B-6 14 to 15 ft		1430		4			X	X												X	4	
5. B-6 28.5 - 29 ft		1445		5			X	X												X	4	
6.																						
7.																						
8.																		Samples collected via 5035A				
9.																						
10.																						

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: WCS 12/22/11 @ 1100
Received By:
2. Relinquished By:
Received By: Sharon Rebar ALS 12/22/11 10:20

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10 Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: (5 Standard) 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

APPENDIX C

Groundwater Sample Analytical Data Report

December 29, 2011

Mr. Thom Davis
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Davis,

On December 22nd, 4 samples were received by our laboratory and assigned our laboratory project number 1112140. The project was identified as your Cascade Laundry. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

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RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/29/2011 1112140 -01
CLIENT CONTACT:	Thom Davis	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 13:00
CLIENT SAMPLE ID	B-7 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/22/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8021	**2.3**	1.0	1	UG/L	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	**13**	2.0	1	UG/L	12/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**136**	12/22/2011	GAP
TFT	EPA-8021	**138**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**112**	12/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/29/2011
		ALS JOB#:	1112140
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Thom Davis	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 14:35
CLIENT SAMPLE ID	B-9 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/22/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8021	**1.0**	1.0	1	UG/L	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	12/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**110**	12/22/2011	GAP
TFT	EPA-8021	**113**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**112**	12/28/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/29/2011 1112140 -03
CLIENT CONTACT:	Thom Davis	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 15:00
CLIENT SAMPLE ID	B-6 Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**320**	50	1	UG/L	12/22/2011	GAP
Benzene	EPA-8021	**22**	1.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8021	**3.9**	1.0	1	UG/L	12/22/2011	GAP
Ethylbenzene	EPA-8021	**18**	1.0	1	UG/L	12/22/2011	GAP
Xylenes	EPA-8021	**8.2**	3.0	1	UG/L	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	**5.9**	2.0	1	UG/L	12/28/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**101**	12/22/2011	GAP
TFT	EPA-8021	**121**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**108**	12/28/2011	GAP

Chromatogram indicates that it is likely that sample contains weathered gasoline.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	12/29/2011 1112140 -04
CLIENT CONTACT:	Thom Davis	DATE RECEIVED:	12/22/2011
CLIENT PROJECT:	Cascade Laundry	COLLECTION DATE:	12/20/2011 16:00
CLIENT SAMPLE ID	Drum Water	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**160**	50	1	UG/L	12/22/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8021	**1.0**	1.0	1	UG/L	12/22/2011	GAP
Ethylbenzene	EPA-8021	**1.5**	1.0	1	UG/L	12/22/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	12/29/2011	GAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.9**	12/22/2011	GAP
TFT	EPA-8021	**110**	12/22/2011	GAP
1,2-Dichloroethane-d4	EPA-8260	**107**	12/29/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lightly weathered gasoline.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/29/2011
		ALS SDG#:	1112140
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY BLANK RESULTS

MBG-122211W - Batch 2394 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/22/2011	GAP

MB-122211W - Batch 2394 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/22/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	12/22/2011	GAP

MB-122211W2 - Batch 2397 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	12/22/2011	GAP
Toluene	EPA-8260	U	2.0	1	UG/L	12/22/2011	GAP
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	12/22/2011	GAP

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	12/29/2011
		ALS SDG#:	1112140
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Thom Davis		
CLIENT PROJECT:	Cascade Laundry		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2394 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	100			12/22/2011	GAP
TPH-Volatile Range - BSD	NWTPH-GX	104	4		12/22/2011	GAP

ALS Test Batch ID: 2394 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	108			12/22/2011	GAP
Benzene - BSD	EPA-8021	111	2		12/22/2011	GAP
Toluene - BS	EPA-8021	103			12/22/2011	GAP
Toluene - BSD	EPA-8021	106	3		12/22/2011	GAP
Ethylbenzene - BS	EPA-8021	100			12/22/2011	GAP
Ethylbenzene - BSD	EPA-8021	103	3		12/22/2011	GAP
Xylenes - BS	EPA-8021	101			12/22/2011	GAP
Xylenes - BSD	EPA-8021	103	2		12/22/2011	GAP

ALS Test Batch ID: 2397 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
1,1-Dichloroethene - BS	EPA-8260	119			12/22/2011	GAP
1,1-Dichloroethene - BSD	EPA-8260	106	12		12/23/2011	GAP
Toluene - BS	EPA-8260	108			12/22/2011	GAP
Toluene - BSD	EPA-8260	96.3	12		12/23/2011	GAP

APPROVED BY

Laboratory Director

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ALS Laboratory Group A Campbell Brothers Limited Company

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Everett, WA 98208
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(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1112140

Date 12-21-11 Page 1 Of 1

PROJECT ID: Cascade Laundry
REPORT TO COMPANY: WES
PROJECT MANAGER: Thom
ADDRESS: 228 E. Champion #101
Bham, WA 98225
PHONE: FAX: 752-9573
P.O. NUMBER: E-MAIL: bdavis@...
INVOICE TO COMPANY: Same ↑
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED / OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	PERC by EPA 8260	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-7 water	12/20/11	1300	water	1			X	X												X	5	
2. B-9 water	↓	1435	↓	2			X	X												X	5	
3. B-6 water	↓	1500	↓	3			X	X												X	4	
4. Drum Water	↓	1600	↓	4			X	X												X	5	
5.																						
6.																						
7.																						
8.																						
9.																			Samples collected via 5035A			
10.																						

LABORATORY COPY

SPECIAL INSTRUCTIONS

SIGNATURES (Name, ~~Company~~, Date, Time):

1. Relinquished By: WES 12/22/11 @ 1100
Received By:
2. Relinquished By:
Received By: Shawn Roberson ALS 12/22/11 10:20

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: (5) 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges