

ERTS 626428

UST 5617

March 15, 2011

Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

**RE: Subsurface Investigation Findings at the former Cascade Laundry Building, 205
Prospect St., Bellingham**

Department of Ecology:

Enclosed find a copy of the report titled *Site Characterization Report, Cascade Laundry & Cleaners Inc., 205 Prospect Street, Bellingham, Washington, FSID #21786898*. The report presents the results of the subsurface investigation conducted at the property on January 24, 2011. Mineral Spirits and Tetrachloroethylene were identified in subsurface soil and groundwater near the southwest corner of the building.

Per the Model Toxics Control Act regulation WAC 173-340-300(2)(a), the report is being submitted to the Washington Department of Ecology on behalf of Cascade Laundry and Cleaners Inc.

Sincerely,



Harold Cashman
Project Manager

RECEIVED

APR 18 2011

DEPT OF ECOLOGY
TCP-NWRO

**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



*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

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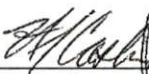
Prepared for

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

Prepared by

Whatcom Environmental Services
228 East Champion Street #101
Bellingham, Washington 98225

March 15, 2011


Harold Cashman
Project Manager



HAROLD J. CASHMAN


Thomas Davis
QA/QC Reviewer

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION.....	1
2.0 SITE DESCRIPTION	2
2.1 Site Topography and Surrounding Area.....	2
2.2 Site Geology	2
2.3 Site Hydrogeology	3
3.0 RELEASE INFORMATION.....	4
4.0 INVESTIGATIVE METHODS	5
5.0 SOIL AND GROUNDWATER SCREENING LEVELS	6
6.0 INVESTIGATION FINDINGS.....	7
6.1 Boring B-1	7
6.2 Boring B-2	8
6.3 Boring B-3	8
6.4 Boring B-4	9
6.5 Boring B-5	10
7.0 CONCLUSIONS	12
8.0 LIMITATIONS	13
9.0 REFERENCES.....	14

LIST OF FIGURES

- Figure 1. Site Location Map
Figure 2. Soil Boring Location Map

LIST OF TABLES

- Table 1. Soil Sample Descriptions - Cascade Laundry, 205 Prospect St., Bellingham, WA
Table 2. Soil Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA
Table 3. Groundwater Sample Analytical Results - Cascade Laundry, 205 Prospect St., Bellingham, WA

LIST OF APPENDICES

- Appendix A - Soil Boring Logs
- Appendix B - Soil Sample Analytical Data Report
- Appendix C - Groundwater Sample Analytical Data Report

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 interbedded 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

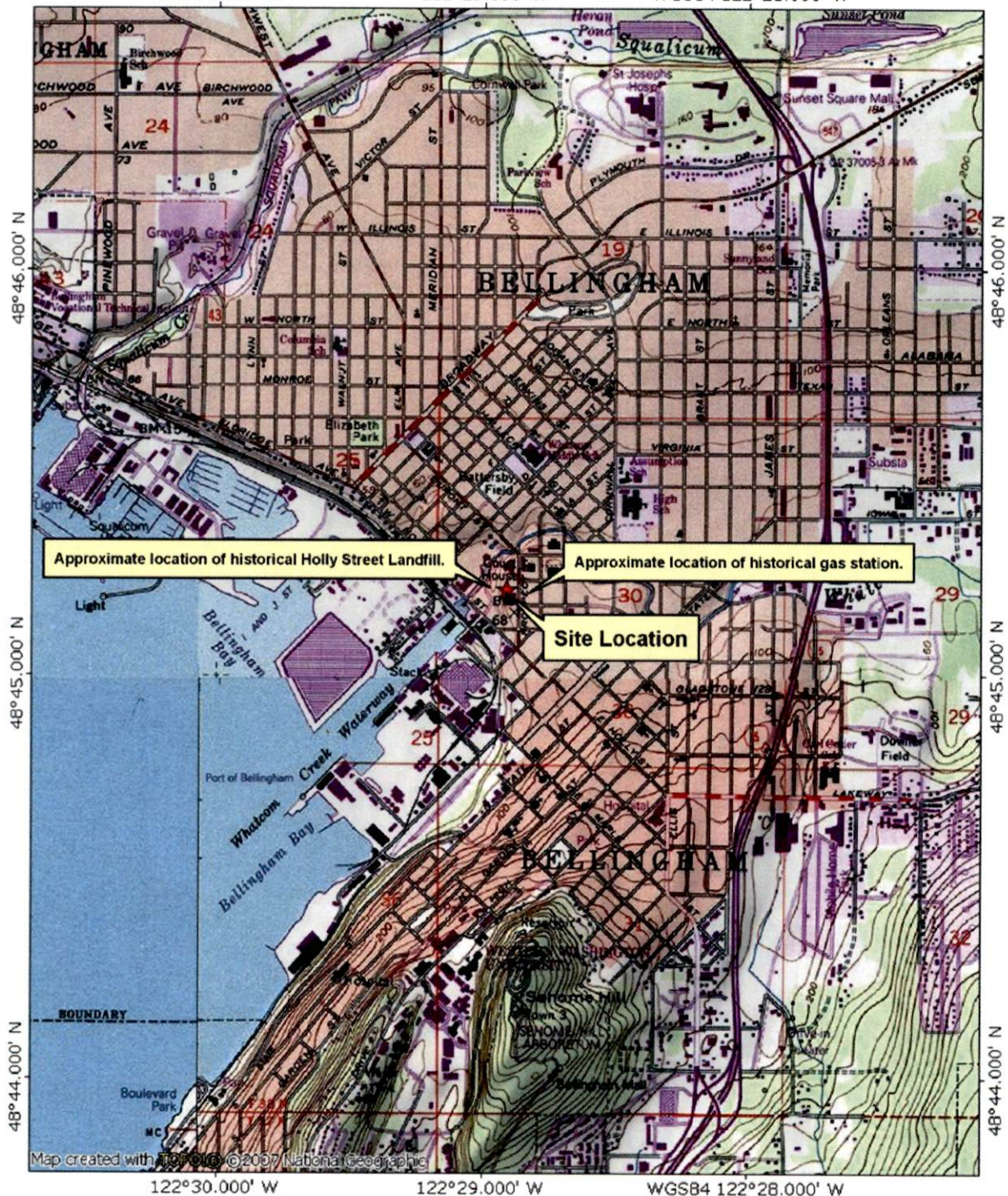
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- Washington State Department of Ecology (Ecology). 1994. Guidance on Preparing Independent Remedial Action Reports Under the Model Toxics Control Act Chapter 70.105D RCW, Working Draft, Publication No. 94-18. March 9, 1994.
- Washington State Department 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

122°30.000' W

122°29.000' W

WGS84 122°28.000' W



Map created with TOPO! ©2007 National Geographic



0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TN* MN
17°
11/05/10

Prepared for:

Cascade
Laundry

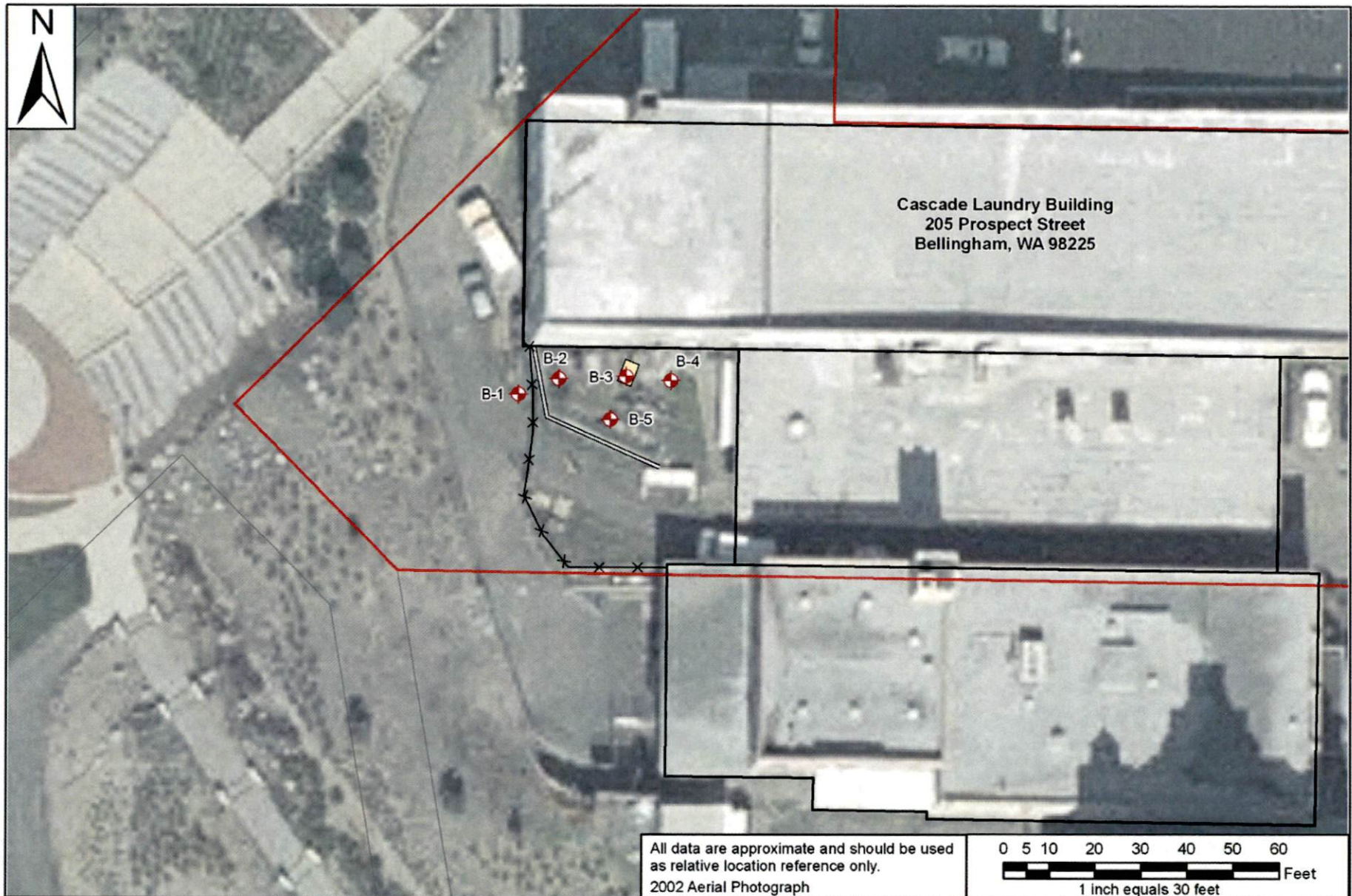
Prepared by:

whatcom
ENVIRONMENTAL

Site Location Map

Cascade
Laundry
11/5/10

Figure 1



- Soil Boring
- Former Tank
- Local Parcels
- Subject Property

- Building
- Fence
- Wall

Prepared for:

Cascade Laundry

Prepared by:

whatcom
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

Total Depth: 20 ft.

[illegible]

WHATCOM ENVIRONMENTAL SERVICES INC.

www.whatcomenvironmental.com

Boring Log

Total Depth: 30 ft.

Depth/Description		Blow Count	FID* (ppm)	Sheen	Sample
0 - 5'	Hand excavated to clear boring location. Sandy gravel with organics.			NS VSS MS MS MS MS MS <	

WHATCOM ENVIRONMENTAL SERVICES INC.

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.

[illegible]

WHATCOM ENVIRONMENTAL SERVICES INC.

www.whatcomenvironmental.com

Boring Log

Project: Cascade Laundry	Sheet: 1 of 1
Client: Cascade Laundry	Drilled by: Cascade Drilling
Boring Number: B-4	Logged by: Thomas Davis
Location: East of tank pit	First Encountered Water: 15 ft.
Date Completed: 1/24/11	Total Depth: 20 ft.

Project: Cascade Laundry	Sheet: 1 of 1
Client: Cascade Laundry	Drilled by: Cascade Drilling
Boring Number: B-4	Logged by: Thomas Davis
Location: East of tank pit	First Encountered Water: 15 ft.
Date Completed: 1/24/11	Total Depth: 20 ft.

[illegible]

WHATCOM ENVIRONMENTAL SERVICES INC.
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WHATCOM ENVIRONMENTAL SERVICES INC.
www.whatcomenvironmental.com

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.

www.whatcomenvironmental.com

APPENDIX B

Soil Sample Analytical Data Report



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225
CLIENT CONTACT: Harold Cashman / Thom Davis
CLIENT PROJECT: Cascade Laundry
CLIENT SAMPLE ID: B-1 17 to 18ft

DATE: 2/1/2011
ALS JOB#: 1101122
ALS SAMPLE#: -01
DATE RECEIVED: 1/27/2011
COLLECTION DATE: 1/24/2011 09:00
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.



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#: -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.



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225
CLIENT CONTACT: Harold Cashman / Thom Davis
CLIENT PROJECT: Cascade Laundry
CLIENT SAMPLE ID: B-3 17 to 18ft

DATE: 2/1/2011
ALS JOB#: 1101122
ALS SAMPLE#: -03
DATE RECEIVED: 1/27/2011
COLLECTION DATE: 1/24/2011 13:00
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.



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#: -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.

**CERTIFICATE OF ANALYSIS**

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	2/1/2011
CLIENT CONTACT:	Harold Cashman / Thom Davis	ALS JOB#:	1101122
CLIENT PROJECT:	Cascade Laundry	ALS SAMPLE#:	-05
CLIENT SAMPLE ID	B-4 14 to 15ft	DATE RECEIVED:	1/27/2011
		COLLECTION DATE:	1/24/2011 14:10
		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.



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#:	-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	ANALYSIS
						DATE	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	ANALYSIS
			DATE	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.



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 2/1/2011
228 E. Champion St., Suite 101 ALS JOB#: 1101122
Bellingham, WA 98225 ALS SAMPLE#: -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.



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)

1/10/11 22

Date 1/26/11 Page 1 Of 2

PROJECT ID: <u>Cascade Laundry</u> REPORT TO COMPANY: <u>Whitman Env. Svcs.</u> PROJECT MANAGER: <u>Husid - Thom</u> ADDRESS: <u>328 E. Champion #101</u> <u>B'ham, WA 98225</u> PHONE: _____ FAX: _____ P.O. NUMBER: _____ E-MAIL: _____ INVOICE TO COMPANY: _____ ATTENTION: <u>Samuel</u> ADDRESS: _____					ANALYSIS REQUESTED										OTHER (Specify)								
					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 ☐ Pb ☐ Cd ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	<u>Perc by EPA 8260</u>		NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
SAMPLE I.D.					DATE	TIME	TYPE	LAB#															
1.	B-1 17 to 18 ft				1-24-11	900	Soil	1													4		
2.	B-2 24 to 25 ft				↓	1150		2													4		
3.	B-3 17 to 18 ft					1300		3													4		
4.	B-3 30 ft					1310		4													4		
5.	B-4 14 to 15 ft					1410		5													4		
6.	B-5 30 ft					1535		6													4		
7.	B-5 17 to 18 ft					1545		7													4		
8.																							
9.																							
10.																							

SPECIAL INSTRUCTIONS

Samples collected via SOBSA

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Mark WES 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

☒ 5 ☐ 3 ☐ 2 ☐ 1 ☐ SAME DAY

Fuels & Hydrocarbon Analysis

☒ 3 ☐ 1 ☐ SAME DAY

OTHER:

Specify: _____

* Turnaround request less than standard may incur Rush Charges

LABORATORY COPY

APPENDIX C

Groundwater Sample Analytical Data Report



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#: -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.



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#: -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.



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	2/1/2011
CLIENT CONTACT:	Harold Cashman / Thom Davis	ALS JOB#:	1101122
CLIENT PROJECT:	Cascade Laundry	ALS SAMPLE#:	-10
CLIENT SAMPLE ID	B-3 Water	DATE RECEIVED:	1/27/2011
		COLLECTION DATE:	1/24/2011 13:25
		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.



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	2/1/2011
CLIENT CONTACT:	Harold Cashman / Thom Davis	ALS JOB#:	1101122
CLIENT PROJECT:	Cascade Laundry	ALS SAMPLE#:	-11
CLIENT SAMPLE ID	B-4 Water	DATE RECEIVED:	1/27/2011
		COLLECTION DATE:	1/24/2011 14:20
		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.



CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE:	2/1/2011
CLIENT CONTACT:	Harold Cashman / Thom Davis	ALS JOB#:	1101122
CLIENT PROJECT:	Cascade Laundry	ALS SAMPLE#:	-12
CLIENT SAMPLE ID	B-5 Water	DATE RECEIVED:	1/27/2011
		COLLECTION DATE:	1/24/2011 16:00
		WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	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	ANALYSIS
			DATE	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.

**CERTIFICATE OF ANALYSIS**

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 2/1/2011
228 E. Champion St., Suite 101 ALS JOB#: 1101122
Bellingham, WA 98225 WDOE ACCREDITATION: 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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 2/1/2011
228 E. Champion St., Suite 101 ALS JOB#: 1101122
Bellingham, WA 98225 WDOE ACCREDITATION: 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

**CERTIFICATE OF ANALYSIS**

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

DATE: 2/1/2011
ALS JOB#: 1101122
WDOE ACCREDITATION: C601

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



CERTIFICATE OF ANALYSIS

CLIENT: Whatcom Environmental Svcs., Inc. DATE: 2/1/2011
228 E. Champion St., Suite 101 ALS JOB#: 1101122
Bellingham, WA 98225 WDOE ACCREDITATION: 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



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 2 Of 2

PROJECT ID: Cascade Laundry REPORT TO COMPANY: Whistler Env. Svcs PROJECT MANAGER: Thom ADDRESS: 225 E. Champion #101 B. ham, WA 98225 PHONE: FAX: PO. NUMBER: E-MAIL: INVOICE TO COMPANY: ATTENTION: Same 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	RCRA-8	Pri Pol	TAL	Metals-MTCA-5	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?		
1. B-1 water	1/24/11	915	Water	8			X	X																						3		
2. B-2 water		1115		9			X	X																						2		
3. B-3 water		1325		10			X	X																						2		
4. B-4 water		1420		11			X	X																						2		
5. B-5 water		1600		12			X	X																						3		
6.																																
7.																																
8.																																
9.																																
10.																																

SPECIAL INSTRUCTIONS

Samples collected via SOSA

SIGNATURES (Name, Company, Date/Time):

1. Relinquished By:

Shawn Robinson ALS 1/26/11 1:15

Received By:

2. Relinquished By:

Shawn Robinson ALS 1/27/11 8:30

Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

OTHER:

Standard 5 3 2 1 SAME DAY

Specify:

Fuels & Hydrocarbon Analysis

Standard 3 1 SAME DAY

* Turnaround request less than standard may incur Rush Charges