ASSOCIATED
ENVIRONMENTAL
GROUP, LLC

PHASE II – SITE CHARACTERIZATON REPORT

Conducted on:
Truck City Truck Stop
3228 Old Highway 99
Mount Vernon, WA 98273

November 30, 2005

Prepared for:
Olmstead Transportation
Mr. Bart Smith
22529 Knapp Rd.
Mount Vernon, WA 98273

Associated Environmental Group, LLC

_____
Dean E. Phillips, RSA, AHERA
Environmental Project Manager
AHERA No: 05-2396
ICC No: 5267497-U7

_____
Michael S. Chun, RSA, AHERA
General Manager/Principal
AHERA No: 05-1356
ICC No: 1006368-U1,2,7

TABLE OF CONTENTS

Enclosed:

APPENDIX A: Site Diagrams/Figures
APPENDIX B: Supporting Documents

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

1.0 INTRODUCTION

The purpose of this site characterization study was to determine the vertical and lateral extent, if any, of soil and ground water contamination at Truck City Truck Stop in Mount Vernon, Washington, hereafter referred to as "subject site". This study was prepared for Mr. Bart Smith of Olmstead Transportation as a result of previous investigations and historical usage of the subject site. This phase II site characterization study was conducted with a truck-mounted Geoprobe within the area surrounding the current underground storage tanks (USTs), product dispenser islands, and the truck stop convenience store in order to characterize the extent, if any, of soil and groundwater contamination. The fieldwork included:

- Collect soil samples in 4-foot intervals for field screening.
- Collect representative soil and groundwater samples from each boring location for petroleum hydrocarbon analyses.
- Conduct field screening of collected soil samples in efforts to delineate vertical and lateral extent of any contamination found onsite.
- Conduct laboratory analysis of all groundwater and select soil, based on field screening, samples for NWTPH-HCID (Hydrocarbon Identification or HCID).
- Record soil characteristics and sampling depths.

This report represents comprehensive documentation of activities relating to site work on the subject property including soil and groundwater sampling.

1.1 Site History

Truck City Truck Stop was developed in 1952-1953 as fueling facility for Standard Oil, the current café and tire center were constructed prior to the Truck Stop at unknown dates. The facility has operated as an independent entity since 1976. The Truck Stop building burned in 1976 and the current facility was built to replace it.

The subject site previously operated eleven USTs for fuel and oil storage. The tanks were installed in 1953 during the development of the property as a Standard Oil fueling station and were located in four tank nests. Three tank nests and one fueling area was located east of the current truck scale and the fourth tank nest is the current tank area.

Mr. Ernest Olmsted, former owner, and Ecology entered into an agreement to remove the six USTs, located in the northeast and southeast tank areas and the associated petroleum-contaminated soils (PCS). An Interim Action Cleanup was conducted by Ecology and their subcontractors in 1992.

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

Mr. Ernest Olmsted, former owner, and Ecology entered into an agreement to remove the six USTs, located in the northeast and southeast tank areas and the associated petroleum-contaminated soils (PCS). An Interim Action Cleanup was conducted by Ecology and their subcontractors in 1992. The following information has been extrapolated from the Interim Action Cleanup Report compiled in 1993 by Mr. John Stormon, Ecology Hydrogeologist.

Ecology decommissioned six 5,000-gallon USTs, two abandon 500-gallon USTs and one former septic tank used as a waste oil tank. The tanks and the associated PCS was excavated and the soil was stockpiled onsite on the eastern portion of the site for aeration to achieve the levels of contaminates below the MTCA Method-A Cleanup Levels. Approximately 6,244 cubic yards of PCS was excavated from the affected area. Three existing groundwater monitoring wells installed by Applied Geotechnology, Inc. (AGI) were located within the excavation area and subsequently destroyed during the excavation of the PCS. The soil excavation was limited on the west boundary of the excavation due to the location of the truck scale and scale house. Elevated levels of PCS continued beyond the western limits of the excavation above MTCA Method-A Cleanup Levels.

In addition to the PCS excavation, 89,991 gallons of petroleum-contaminated groundwater was evacuated from the excavation pit and disposed at an offsite facility. "Free product" was observed in the excavation atop the groundwater. Groundwater was observed between 6.5 and 7.5 feet below ground surface.

Mr. Stormon concluded that groundwater contamination was still present onsite and that additional subsurface investigations should be conducted to assess the groundwater conditions and other potential sources of contamination. Additionally, Mr. Stormon noted comments from a former employee of the Truck City Truck Stop that indicated the presence of two oil tanks onsite that were not assessed during site investigations. The Interim Cleanup Report did not indicate the potential locations of the two tanks; AEG's site observations did not indicate the presence of USTs.

According to Mr. Roger Nye, Ecology UST Compliance Inspector, additional groundwater monitoring wells were installed post-excavation to monitor the groundwater contamination. However, due to financial limitations, the wells were closed prior to any recorded groundwater sampling events and no monitoring well installation reports were produced. AEG observed seven monitoring well monuments onsite; the monitoring wells were in very poor condition.

According to the Department of Ecology's (Ecology) UST database, the current UST system was installed in 1978. The system consists of three 5,000-gallon, single-wall steel tanks, each for gasoline storage and one 15,000-gallon, single-wall steel tank for diesel storage. The system was upgraded in 1998 to comply with state and federal requirements and has cathodic protection

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

(corrosion protection). The tanks are located approximately 40 feet east of the Truck City Truck Stop convenience store.

The UST system has a Red Jacket ST 14.01 Automatic Tank Gauging system (ATG) that performs leak detection testing on a daily basis. Tank #2 and Tank #3 gasoline USTs appear to be operating properly and are in compliance with current regulations, Underground Storage Tanks, WAC 173-360. However, the ATG system was unable to conduct leak detection tests for Tank #1. AEG did observe an excessive amount of water in Gasoline Tank #1, exceeding two inches (2.39 Inches), approximately 58 gallons, no high water warning was displayed on the ATG system.

In August of 2003, the three remaining monitoring wells were sampled by AEG and analyzed for petroleum hydrocarbons by HCID. All groundwater samples collected from the wells were non-detect for petroleum hydrocarbons.

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

2.0 SOIL AND GROUNDWATER CHARACTERIZATION

On November 29, 2005 AEG and subcontractor, Environmental Services Network (ESN), collected soil and water samples from eleven borings surrounding the current UST system and the subject property. Samples were collected using a truck-mounted Geoprobe with disposable poly-liners. Based on field screening conducted onsite, soil samples were collected and preserved for laboratory analyses in four-foot intervals starting at four feet below ground surface (bgs). Groundwater samples taken from all eleven borings were preserved on site and submitted for laboratory analysis. Groundwater was encountered during drilling activities at approximately 5-7 feet bgs. *Refer to Appendix – A: Site Diagrams for the sample locations.*

2.1 Soil and Groundwater Sampling Procedures

AEG submitted soil samples from borings B1 through B11, at varying depths, for laboratory analysis. The soil samples were placed in labeled laboratory supplied four-ounce glass jars with Teflon-lined lids. The soil samples were analyzed for hydrocarbon identification (NWTPH-HCID).

Groundwater samples were taken from all eleven borings using a stainless steel screen and peristaltic pump. The groundwater samples were collected in laboratory supplied and labeled 40-milliliter glass vials with Teflon-lined lids. The water samples were analyzed for hydrocarbon identification (NWTPH-HCID).

To reasonably ensure the purity of AEG's samples, the following actions were taken (1) N-DEX gloves were used in handling all sampling jars and sampling devices; (2) The sampling equipment was scrubbed with ADALOX detergent and triple-rinsed with distilled water prior to each sample extracted; and (3) The containers were then placed in a cooler to keep the sample temperature at 34 degrees F and transported under a chain-of-custody to Libby Environmental, LLC of 4139 Libby Road N.E., Olympia, Washington 98506.

The soil and groundwater results are presented in Table 1 and 2 in the supporting documents attached to this report.

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on field and laboratory sampling results and site observations, AEG has concluded the following:

- All soil samples analyzed by HCID were non-detect for gasoline, diesel, and oil range hydrocarbons.
- All groundwater samples analyzed by NWTPH-HCID were non-detect for gasoline, diesel, and oil range hydrocarbons.
- Groundwater on the subject site is located from 5 to 7 feet bgs.
- The soil type onsite is very dense fine sand intermixed with gravel and bands of clay.

No groundwater or soil contamination was identified on the subject property during this site characterization study and additional environmental investigation is not recommend or warranted.

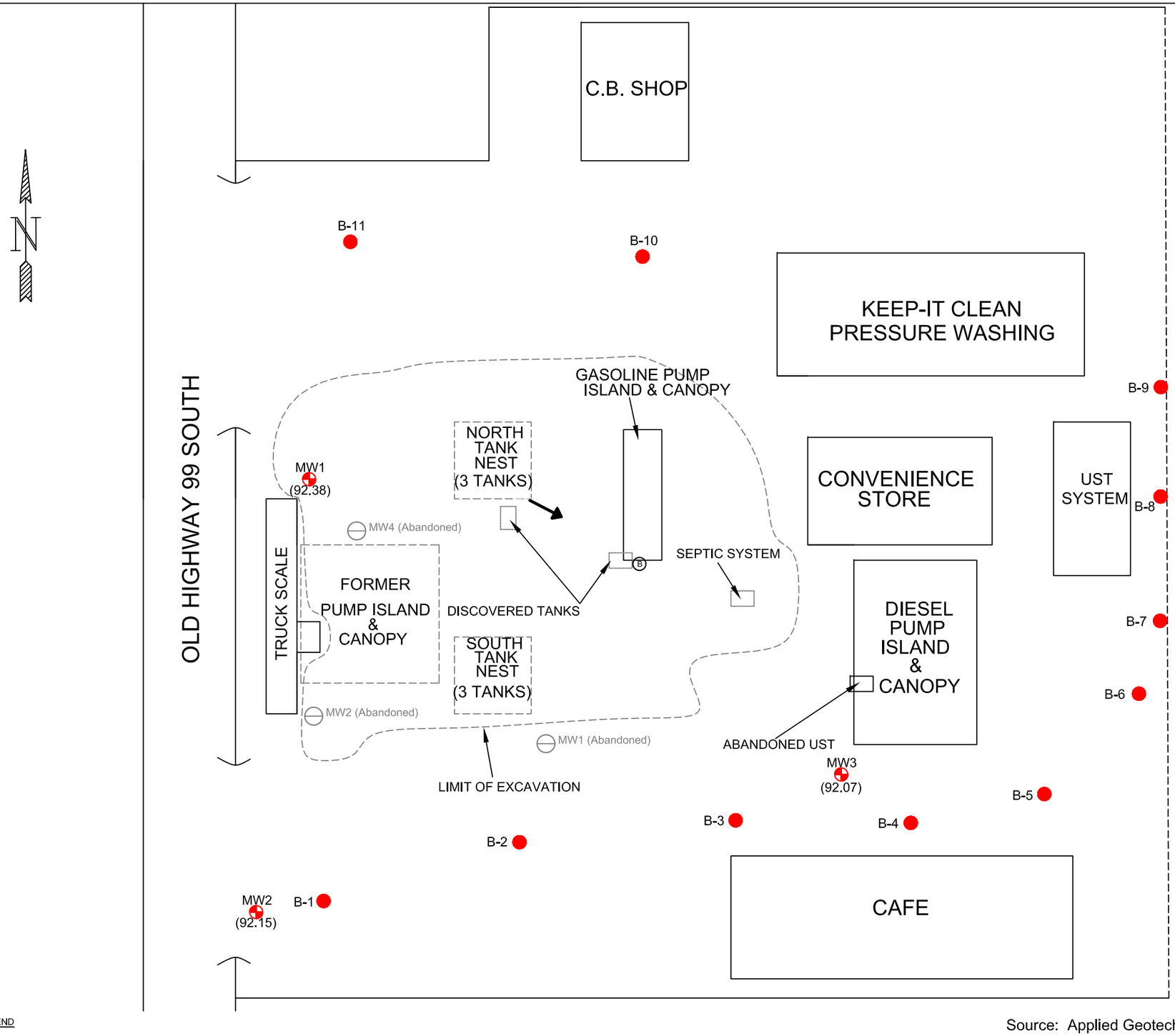
1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com

4.0 LIMITATIONS

This report summarizes the findings of the services authorized under our agreement. It has been prepared using generally accepted professional practices, related to the nature of the work accomplished. This report was prepared for the exclusive use of Mr. Bart Smith and his designated representatives for the specific application to the project purpose.

Recommendations, opinions, site history and proposed actions contained in this report apply to conditions and information available at the time this report was created. Since conditions and regulations beyond our control can change at any time after completion of this report, or our proposed work, we are not responsible for any impacts of any changes in conditions, standards, practices and/or regulations subsequent to our performance of services. We cannot warrant or validate the accuracy of information supplied by others, in whole or part.

1728 STATE AVENUE, SUITE 101 • OLYMPIA, WA • 98506
Phone: 360-352-9835 • Fax: 360-352-8164 • Email: mchun@aegwa.com



Notes:
1. The locations of all features are approximate
2. All wells were redesignated by AEG to current number sheme
3. 1989 report by Applied Geotechnology Inc. indicates groundwater flow to the Southwest. Current measurements conducted by AEG indicate groundwater flow to the Southeast. Additional groundwater measurements are necessary to verify data.
4. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document. The data was compiled from sources as listed in this figure. The data sources do not guarantee these data are accurate or complete.

LEGEND

- MW1 — APPROXIMATE ABANDONED WELL LOCATIONS
- MW1 — APPROXIMATE MONITORING WELL LOCATION
- B-1 — APPROXIMATE BORING LOCATIONS
- Ⓑ — ARBITRARY ELEVATION BENCHMARK OF 100 FT
- 90.00 — INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR (FT)
- (92.07) — SPOT GROUNDWATER SURFACE ELEVATION (FT)
- – – – PREVIOUSLY REMOVED

Source: Applied Geotechnology, Inc.

No.	Revision/Issue	Date
01	WWR – AEG	8/20/03

ASSOCIATED ENVIRONMENTAL GROUP, LLC
Environmental Consulting and Contracting
1728 State Avenue, Suite 101
Olympia, Washington 98506
(360) 352-9835 Fax (360) 352-8164

BORING LOCATION MAP

Truck City Truck Stop
3228 Old Highway 99 South
Mt. Vernon, WA 98237

Project# 05-250	Date: 12/6/05
File:	Sheet 1 of 1

Table 1. Summary of Groundwater Analytical Results
Truck City Truck Stop
Mount Vernon, WA
05-250

Sample Number	Date Analyzed	HCID[1] (µg/l)			
		Gasoline	Diesel	Heavy Oil	Mineral Oil
B1	12/1/2005	<250	<500	<500	<500
B2	12/1/2005	<250	<500	<500	<500
B3	12/1/2005	<250	<500	<500	<500
B4	12/1/2005	<250	<500	<500	<500
B5	12/1/2005	<250	<500	<500	<500
B5 Dup	12/1/2005	<250	<500	<500	<500
B6	12/1/2005	<250	<500	<500	<500
B7	12/1/2005	<250	<500	<500	<500
B8	12/1/2005	<250	<500	<500	<500
B9	12/1/2005	<250	<500	<500	<500
B10	12/1/2005	<250	<500	<500	<500
B11	12/1/2005	<250	<500	<500	<500
Method Detection Limit		250	500	500	500
Method A Cleanup Levels		800	500	500	500

Notes:
[1]Analyzed by NWTPH-HCID (Hydrocarbon Identification)
µg/l = micrograms per liter = parts per billion (ppb)
Bold indicates the detected concentration excceds the MTCA Method-A levels

Table 2. Summary of Soil Analytical Results
Truck City Truck Stop
Mount Vernon, WA
05-250

Sample Number	Depth in Feet Below Ground Surface(bgs)	Date Analyzed	HCID[1] (mg/kg)			
			Gasoline	Diesel	Heavy Oil	Mineral Oil
B2-7'	7	12/2/2005	<250	<500	<500	<500
B3-6'	6	12/2/2005	<250	<500	<500	<500
B3-8'	8	12/2/2005	<250	<500	<500	<500
B4-6'	6	12/2/2005	<250	<500	<500	<500
B5-5'	5	12/2/2005	<250	<500	<500	<500
B6-6'	6	12/2/2005	<250	<500	<500	<500
B7-5'	5	12/2/2005	<250	<500	<500	<500
B8-5'	5	12/2/2005	<250	<500	<500	<500
B8-8'	8	12/2/2005	<250	<500	<500	<500
B8-8' Dup	8	12/2/2005	<250	<500	<500	<500
B9-5'	5	12/2/2005	<250	<500	<500	<500
B10-5'	5	12/2/2005	<250	<500	<500	<500
Method Detection Limit			250	500	500	500
Method A Cleanup Levels			30	2,000	2,000	4,000

Notes:
[1]Analyzed by NWTPH-HCID (Hydrocarbon Identification)
mg/kg = milligrams per kilograms = parts per million (ppm)
Bold indicates the detected concentration excceds the MTCA Method-A levels

Site Characterization Photographs – Truck City Truck Stop, Mount Vernon, WA

Boring #3

Boring #5

Boring #7. UST nest to left of probe rig.

Typical soil sample of first four feet bgs.