ASSOCIATED
ENVIRONMENTAL
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Department of Ecology

SITE CHARACTERIZATION

Conducted on:

Flegel Property
407A Porter Way
Milton, Washington

June 24, 2009

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1. INTRODUCTION

Associated Environmental Group, LLC (AEG) has completed a Site Characterization of the Flegel Property, located at 407A Porter Way in Milton, Washington (the Site). Written authorization from Mr. Dusty Flegel, Site property owner, to perform this Site Characterization was provided to AEG in April 2009. The scope of work for the Site Characterization was developed in accordance with Ecology Model Toxics Control Act (MTCA) Method A cleanup regulations. The investigation was performed in general accordance with the American Society for Testing and Materials (ASTM) Standard E 1903-97, *Standard Guide Environmental Site Assessments: Phase II Environmental Site Assessment Process.*

1.1 Site & Vicinity Area Background

The Site, Pierce County parcel number 0420057010, is a rectangular property comprised of approximately 3.41 acres of undeveloped land. Adjacent to the west of the Site is H&H Diesel, and further discussion of this facility is provided below. The Site is located at the terminus of 4th Ave Ct which trends perpendicular to Porter Way in Milton, Washington (southwest quarter of Section 05, Township 20 North, Range 04 East). The Site, originally comprised of wetlands, was reportedly filled during the 1960s and 1970s with debris collected from waterfront logging yards in the Tacoma area. Soil and groundwater petroleum contamination is present at the Site and the adjacent site to the west, H&H Diesel property, due to a release of motor oil from an aboveground storage tank located on the H&H Diesel property. Figure 1, *Site & Vicinity Map*, presents the general boundaries and vicinity area of the Site. Figure 2, *Previous Environmental Investigations*, presents the layout of the property and locations of soil borings and test pits explored by previous consultants. Photographs of the Site are presented in Appendix A, *Site Photographs*. Both the Site and the H&H Diesel facility have undergone several phases of environmental investigation between 1996 and 2002. Below is a chronological summary of site investigations conducted in relation to the Site and subsequent corresponding communications with Ecology.

1.2 Previous Environmental Work Summary

In July 1996, Columbia Environmental conducted a Phase II Environmental Site Assessment (ESA) at the Site. Three soil borings were advanced on the west end of the property near the H&H Diesel maintenance facility. Analytical results from soil samples collected from these borings indicated elevated concentrations of diesel and heavy oil range total petroleum hydrocarbons (TPH). These concentrations were in excess of the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A soil cleanup levels at that time. Groundwater samples collected from these three boring also indicated elevated concentrations of diesel range petroleum hydrocarbons, at levels above Ecology Method A

groundwater cleanup levels at that time (Columbia Environmental 1996). The conclusion of this Phase II ESA was that further investigation was warranted.

According to a report by Geo Group Northwest Inc. (Geo Group), SECOR performed a Limited Site Assessment at the Site in March 1997. It is believed that this work consisted of excavating test pits near the western property line shared with H&H Diesel and collecting soil samples. No further information was provided to AEG as to the outcome of this investigation. According to the same report, in 1998 the surface area of the suspected contamination plume was sprayed with a substance implied to increase microbial activity and reportedly to reduce petroleum hydrocarbon concentrations via bioremediation (Geo Group Northwest, 2002). There was, however, no further information provided to AEG pertaining to this alleged activity.

In March 1999, Saltbush Environmental Services, Inc. (Saltbush) conducted a Limited Soil and Water Sampling and Testing at the Site. Two shallow borings, identified as W-1 and W-2, were advanced within the area of the alleged bioremediation, to a depth of approximately four feet below ground surface (bgs). Both soil and groundwater samples were collected from these borings and analyzed for diesel and oil range TPH. Diesel and oil range petroleum hydrocarbons for groundwater were found at both locations to be above the current MTCA Method A cleanup levels (Saltbush, 4/1999).

In July 1999, Saltbush advanced 14 borings (B1 through B14) at the Site and the adjoining H&H Diesel property. Of the 30 soil samples reportedly collected, three were submitted for laboratory analysis. Analytical results indicated no detectable concentrations diesel or oil-range TPH in all soil samples. These borings were reportedly advanced to depths of six to eight feet bgs. Groundwater samples were not collected from these borings, and the borings were not completed as monitoring wells (Saltbush, 8/1999).

In September 1999, Saltbush installed a monitoring well at the Site (MW-2) and three on the H&H property (MW-1, MW-3 and MW-4). These wells were completed to a depth of approximately 9.5 feet bgs. No soil samples were collected from these wells during drilling activities. One week after construction of these wells, groundwater elevations and groundwater samples were taken. There were no indications of the presence of petroleum hydrocarbons from any of the wells on the Site (Saltbush, 10/1999).

On May 10, 2000, Mr. Panjini Balaraju of Ecology sent a letter to Ms. Dorothy Holmes of H&H Diesel. The letter was a follow-up to a meeting between Mr. Balaraju, Mr. Tom Smith of Saltbush and Mr. Ken McCulloch of H&H Diesel. In the Letter, Mr. Balaraju detailed recommendations of Ecology for further site work to be performed in order to receive a NFA letter.

On May 22, 2000, Mr. Balaraju sent a second letter to Ms. Holmes to follow-up the first. In this second letter Mr. Balaraju detailed additional recommendations for the work needed in order to obtain a NFA letter.

On July 14, 2000, Mr. John F. Hildebrand of Saltbush sent a letter to Mr. Balaraju contesting portions of the recommendation. He stated his recommendation to his client was that further groundwater characterization investigation be done prior to the removal of the contaminated soil may not be prudent.

On July 31, 2000, Mr. Balaraju responded to Mr. Hildebrand's above mentioned letter. In this letter, Mr. Balaraju explained the recommendations stated in the May 22, 2000 letter and accepted Mr. Hildebrand's proposal to address contaminated soils prior to groundwater contamination. He also detailed 4 separate options for investigation, characterization and remediation of soil and groundwater contamination. The letter also cited concerns surrounding the type of backfill used at the Site and requested additional investigation regarding the backfill to include testing soil and groundwater for metals (Ecology, 2000).

In June of 2001, LSI-ADAPT was retained by a potential purchaser of the Site to perform a Limited Assessment of soil and groundwater. Five test pits were dug on the site with TP-5 being located near the shared property line. Soil and groundwater samples were collected from these test pits and analyzed for petroleum hydrocarbons and metals. Laboratory results of samples taken from TP-5 indicated a presence of heavy oil range TPH. In addition, the results also indicated low detections of lead and chromium (LSI-ADAPT, 2001).

On January 10, 2001, Mr. Hildebrand of Saltbush sent a letter to Mr. Balaraju, Ecology. The letter requested further review of data regarding contamination at the Site.

In August 2002, Geo Group conducted an Evaluation of Site Environmental conditions, for the Site owners. During the course of this evaluation, Geo Group reviewed environmental information provided by H&H Diesel for the Site. Geo Group concluded that further subsurface soil and groundwater investigation was needed east of the former AST location. Geo Group recommended that a partial cleanup of the contamination would not result in the issuance of a NFA letter from Ecology, but may decrease the likelihood of an enforcement action being imposed for the entire extent of the contamination on both properties as contamination levels appear to be relatively low (Geo Group, 2002).

AEG met with Mr. Charles Cline, Ecology Toxics Cleanup Manager, in September 2007 to discuss the environmental concerns at the Site due to the findings of petroleum hydrocarbons

impacted soil and groundwater at the adjoining H&H Diesel property. A scope of work for supplemental environmental investigations at the Site was achieved based on this meeting with the goal of attaining a Property Specific No Further Action determination for the Site.

1.3 Objectives and Scope of Work

The objective of the Site Characterization investigation at the Site was to 1) evaluate the potential of migration of dissolved phase diesel and gasoline range petroleum hydrocarbons from offsite areas onto the Site, specifically due to confirmed petroleum impacted soil and groundwater at the adjoining H&H Diesel property to the west of the Site; and 2) characterize the fill present at the Site and evaluate it for presence of contaminants of concern including petroleum hydrocarbons in the gasoline, diesel through mineral oil range, volatile organic compounds, and metals.

AEG's scope of work for the Site Characterization investigation included subsurface explorations via a truck mounted direct push probe to obtain soil samples at selected depths, installation of three 2 inch flush-mounted groundwater monitoring wells, collection of groundwater samples, test pits explorations and soil sampling of test pits, analytical laboratory testing of soil and groundwater samples, data analysis and preparation of this report. Tasks performed included the following:

- Conducted both public and private utilities locates for the Site. The locates performed by Underground Utilities Locate Center included only areas in the public right-of-ways. Applied Professional Services (APS) provided private utility locates on the Site.

- Advanced three soil borings via the direct push probe drilling method at the following locales and completed these borings as 2 inch diameter, 13 foot bgs resource protection wells: AEG MW-1 – in the north-central area of the Site; AEG MW-2 – in the south east area of the Site; and AEG MW-3 – adjacent to the east of the H&H Diesel property. ADAPTMW-2 was also located for future utilization for groundwater characterization at the Site. A total of three borings were advanced to a maximum depth of 19 feet bgs.

- Continuously logged soil borings documenting soil lithologies encountered, lithologic contacts, moisture, density, sample depths, photoionization detection readings, and information regarding sheens and odors, as applicable. Field screen each sample utilizing a Photoionization Detector (PID) to facilitate the selection of appropriate soil samples to be submitted to the analytical laboratory. The soil samples were handled and transported in accordance with industry standard chain-of-custody protocols.

- Excavated nine test pits (TP-1 through TP-9) throughout the Site. The test pits were excavated to depths of ranging from 6 ½ feet to 9 feet bgs – refer to Figure 2 for test pit locations.

- Selected up to two soil samples from each test pit and up to three soil samples from selected intervals of the borings for laboratory analysis.

- Analyzed selected soil samples for the following analyses on a standard laboratory turn-around-time:
    - ❖ Gasoline range TPH by Northwest Method NWTPH-Gx;
    - ❖ Diesel through mineral oil range TPH by Northwest Method NWTPH-D/Dx Extended;
    - ❖ Volatile organic compounds (VOC) including benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8260B. Other VOC analyzed included were methyl tertiary-butyl ether (MTBE), total naphthalenes, 1-2 dibromoethane (EDB), and 1-2 dichloroethane (EDC) via EPA Method 8260B.
    - ❖ Semi-volatile organic compounds including benzo(a)pyrene, phenol, and fluorene among other semi-volatiles compounds via EPA Method 8270; and
    - ❖ Priority pollutant metals including mercury, lead, cadmium, chromium and arsenic via EPA Method 7000 series.

- Completed the three borings as dedicated monitoring wells (AEG MW-1 through AEG MW-3) constructed of 2-inch diameter, schedule 40, flush-threaded, PVC casing mated to an appropriate length of screened interval, annular borehole materials such as silica sand, bentonite seal, and a surface-flush monument cemented in place. Each well was constructed in accordance with the State of Washington Department of Ecology (Ecology) *Minimum Standards for the Construction and Maintenance of Wells,* WAC 173-160.

- The screened interval at all the completed monitoring wells was 3 feet to 13 feet bgs.

- The monitoring wells were minimally developed via purging at each well until the discharge was clear of sediment, clear in color, and at least three well casing volumes had been purged.

- Conducted groundwater monitoring and sampling activities at all monitoring wells at the Site including AEG MW-1 through AEG MW-3 and ADAPT MW-2. Prior to collecting groundwater samples, the following activities were conducted:

- ❖ Obtained depth-to-water measurements at all monitoring wells;
- ❖ Conducted limited well development/purge via the peristaltic pump;
- ❖ Recorded natural attenuation field parameters including pH, conductivity, temperature, dissolved oxygen, turbidity, and salinity during purging activities;
- ❖ Collected representative groundwater samples from each of the monitoring wells in laboratory provided containers. The containers were labeled and placed in a portable chilled ice chest and transported to Libby Environmental laboratory following standard chain-of-custody procedures.

- Analyzed groundwater samples for gas range organics as per MTCA Cleanup Regulation Table 830-1, *Required Testing for Petroleum Releases.* The analyses included:
  - ❖ Gasoline range TPH by Northwest Method NWTPH-Gx;
  - ❖ Diesel through mineral oil range TPH by Northwest Method NWTPH-D/Dx Extended;
  - ❖ Gasoline associated VOC including BTEX;
  - ❖ Chlorinated solvents related VOC including PCE and its associated daughter products (i.e. breakdown products) including trichloroethene (TCE), *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride, via EPA Method 8260B; and
  - ❖ Priority pollutant metals including mercury, lead, cadmium, chromium and arsenic.

- Compared soil and groundwater analytical results to Ecology MTCA Method A soil and groundwater cleanup levels for the above indicated constituents.

- Retained a Professional Licensed Surveyor, Pacific Geomatic Services, Inc., to survey the Site and elevations of all wells at the Site. Ground surface and casing elevations at each well were surveyed to the nearest 0.01 foot relative to an assigned benchmark.

- Prepared this report containing a summary of the subsurface conditions encountered, a discussion of site soil and groundwater conditions, analytical laboratory results and interpretation.

1.4 Site Geology and Hydrogeology

According to the *Geologic Map of Washington, Southwest Quadrant*, the Site and vicinity area is underlain by glacial Quaternary age Vashon Till deposits (Walsh, T.J., Korosec, M.A., et al, 1987). The till deposits typically consist of "*Unsorted, unstratified, highly compacted mixture of clay, silt, sand, gravel, and boulders deposited by glacial ice...*" However, in general, the

geology of the Site vicinity area is generally comprised of fill overlying natural wetlands and glacial sediments.

AEG also reviewed well logs from other subsurface activities conducted in the vicinity area. These logs suggest that the subsurface was comprised of "*...mottled, stiff to very stiff, light brown, elastic silt*" deposits found at depths up to 19 to 26 feet bgs. Subsurface conditions at the Site, at locations of investigation, generally consist of fill deposits. Fill deposits typically consisted of loose to medium dense black-gray silty sand with gravel or clay and local brick, metal and wood debris to approximately nine feet bgs. Fill deposits were also logged to 19 feet bgs, the maximum depth explored. Groundwater was encountered during subsurface investigation activities ranging from approximately 3 1/2 feet to 8 1/2 feet bgs. The nature of the soils in the water-bearing zones appears to range from loose to medium dense silty sand to silty sand with clay or gravel and wood debris.

The depth-to-groundwater encountered at AEGMW-1 through AEGMW-3 and ADAPTMW-2 ranged from approximately 1.55 feet to 5.65 feet bgs during groundwater monitoring/sampling activities on May 28, 2009.

Based on the topography of the vicinity area, the direction of regional groundwater flow appears to be generally to the west, towards the Hylebos Waterway (Commencement Bay) located aprpximately 1 to 1 1/4 miles to the west, and/or to the south, towards Hylebos Creek which is directly west of the Site and discharges to areas south of the Site towards the Hylebos Waterway. Figure 4. *Groundwater Contour Map*, presents the direction of shallow groundwater flow based on surveyed groundwater elevations at the Site. Localized groundwater flow at the Site appears to reflect that of the regional area with westerly and southerly flow components.

2. FIELD METHODOLOGY

AEG advanced 3 soil borings (AEG MW-1 through AEG MW-3) and 9 test pits (TP-1 through TP-9) at the Site on May 13, 2009. The borings were advanced via a truck mounted direct push probe drilling rig operated by Northwest Probe of Fife, Washington, and completed as monitoring wells (AEG MW-1 through AEG MW-3). The test pits were excavated via a John Deere 120 excavator operated by Clawson Construction of Tumwater, Washington at the Site. The soil sampling procedure during the direct push probe drilling involved pushing in increments of four feet using a two-inch, inside diameter, stainless steel sample corer with a four foot long Teflon sample sleeve insert and connecting drilling rods. The maximum depth of borings advanced was 19 feet bgs. Test pits were excavated to a maximum of depth of nine feet bgs. The borings and excavations were advanced at selected areas to evaluate the potential of migration of dissolved phase diesel and gasoline range petroleum hydrocarbons and VOC from offsite areas onto the Site, specifically from the H&H Diesel property adjacent to the west of the Site. Test pits explorations were completed throughout the Site to further characterize the fill material found at the Site.

Boring AEG MW-1 was placed northwest central portion of the Site. Boring AEG MW-2 was placed in the southeast central portion of the Site. Boring AEG MW-3 was placed adjacent to the western boundary of the Site near the H&H Diesel property to the west. In addition, as recommended by Ecology this boring was placed in between previous Salthbush boring numbers W-1 and W-2 (locales of elevated detections of diesel and heavy oil range TPH according to Saltbush Inc.). Test pits TP-1 through TP-9 were placed in areas to allow for the full characterization of the Site including those areas closest to the H&H Diesel property and past locations of known contaminants of concern.

AEG elected to submit select soil samples for the following contaminants of concern: gasoline range TPH, diesel through mineral oil range TPH, priority pollutant metals, VOC in particular gasoline associated VOC including BTEX constituents and chlorinated solvents associated VOC including PCE and its breakdown products, and semi-volatile organic compounds. These laboratory analyses were selected due to the following factors: 1) previous detections of elevated levels of diesel range TPH during previous environmental investigations conducted at the Site and at the H&H Diesel property by Saltbush, LSI-ADAPT, etc.; and 2) to fully characterize the extent and possible presence of contaminants of concern due to the unknown origin and nature of the fill material at the Site.

All monitoring wells were constructed to a depth of 13 feet bgs. The locations of the monitoring wells and site features are illustrated in Figures 2 through 4. Photo documentation of the subsurface investigations is presented in Appendix A, *Site Photographs*.

2.1 Soil Sampling Procedures

Soil samples were collected and observed to document soil lithology, color, moisture content, and sensory evidence of impairment. Samples collected via borings utilized a two-inch, inside diameter, stainless steel sample corer with a four foot long Teflon sample sleeve insert and connecting drilling rods. Disturbed soil samples from the test pits explorations were uniformly obtained from the central-back portion of the bucket. All soil samples were classified in the field, field screen utilizing a PID to facilitate the selection of samples for analysis, and immediately transferred to laboratory provided pre-weighted 40-ml VOA glass vials with septum sealed Teflon-lined screw caps and 4 oz. glass jars. All soil samples were placed in a portable chilled ice chest. Soil sampling for VOC and field preservation methods followed methods set forth by Ecology's Method 5035A, "*Collecting and Preparing Soil Samples for VOC Analysis*" which minimizes VOC losses.

The soil samples were field screened using a PID for the presence of VOC. The PID field screening results ranged from 0.0 to 62.8 volumetric parts per million (Vppm) at boring MW-4. The highest readings were detected at depths of 5 feet and 9 feet bgs at excavation TP-8. The PID readings are presented on the soil boring logs.

Two to three soil samples were selected from each boring for laboratory analysis while one to two soil samples were selected from each test pit. The samples were transported to ESN Northwest, a Washington State certified analytical laboratory located in Olympia, Washington, for analysis following industry standard chain-of-custody procedures.

Selected soil samples from all borings and test pits were analyzed for gasoline range TPH via Northwest Method NWTPH-Gx, diesel through heavy oil range TPH via Northwest Method NWTPH-Dx/Dx Extended, priority pollutant metals - MTCA 5 metals, and VOC including BTEX and PCE and its breakdown products via EPA Method 8260, and semi-volatile organic compounds via EPA Method 8270. Table 1, *Summary of Soil Analytical Results – TPH, BTEX & Metals* and Table 2, *Summary of Soil Analytical Results – Selected VOC and Semi-VOC*, present analytical soil results as compared to Ecology MTCA Method A soil cleanup levels. Boring logs, test pit logs and soil laboratory analytical results are provided in Appendix B, *Supporting Documents*.

2.2 Monitoring Well Construction/Development

The monitoring well design and construction methods conformed to requirements and specifications outlined in Washington Administrative Code 173-160 for "*resource protection wells*" in the State of Washington. Due to shallow depth-to-water at this property, the monitoring wells were installed to a total depth of 13 feet. Pre-packed 2-inch diameter, schedule 40, flush-threaded, PVC wells were installed at all locales and consisted of 10 feet of 2-inch

diameter, 0.010-inch machine slotted PVC well screen mated to 3 feet of 2-inch diameter, threaded, flush joint PVC riser pipe to the surface, and surrounded by pre-packed sand pack, Colorado Silica sand10x20. As-built schematics for the wells logs are presented in Appendix B, *Supporting Documents*.

The annulus of each boring was additionally backfilled with a pre-sieved Colorado 10x20 grade annular silica sand pack from the bottom of the casing to approximately one foot above the top of the well screen. A bentonite seal was placed above the sand pack to prevent the infiltration of surface water along the well casing to stabilize the upper section of the well. The wells were completed as flush-mounted monitoring wells.

The wells were minimally developed via purging at each well until the discharge was clear of sediment, clear in color, and at least three well casing volumes had been purged. Approximately 10 gallons of purge water was developed from each well. The completed monitoring wells were purged again prior to the collection of representative groundwater samples for laboratory analysis.

2.3 Groundwater Sampling Procedures

Groundwater monitoring and sampling activities for AEG MW-1 through AEG MW-3 and ADAPT MW-2 occurred on May 28, 2009. Prior to sampling, depth-to-water measurements were obtained by using an electronic water level indicator. The static water level at the Site at the time of sampling ranged from approximately 1.55 to 5.65 feet bgs.

Prior to sample collection, all monitoring wells were purged of a minimum of three well casing volumes of groundwater or until the field parameters, including pH, temperature, specific conductance, dissolved oxygen, and/or turbidity have stabilized. The wells were sampled with dedicated polyethylene tubing using the peristaltic pump to mitigate cross contamination during groundwater sampling activities.

Groundwater samples were collected placed in laboratory provided containers including 40 milliliter (mL) glass VOAs (vials) for gasoline range TPH and VOC; a 250 mL polyethylene container for metal analysis; and a 500 mL ambers for diesel/heavy oil range TPH. The groundwater samples collected were selectively analyzed for constituents of concern similar to the soil laboratory analyses which included gasoline, and diesel through mineral oil range TPH, priority pollutant metals, and volatile organic compounds including BTEX, PCE and its breakdown products. Table 3, *Summary of Groundwater Analytical Results – TPH and Metals* and Table 4, *Summary of Groundwater Analytical Results – Selected VOC*, presents analytical groundwater results as compared to Ecology MTCA Method A groundwater cleanup levels. Table 5, *Summary of Groundwater Elevations*, presents the depth-to-water and groundwater

elevations for all monitoring wells. Field parameters monitored during the groundwater sampling event are presented in Table 6, *Summary of Monitoring Well Natural Attenuation Parameters*. Figure 2, *Groundwater Contour Map,* presents the locations of the monitoring wells at the Site and the direction of groundwater flow for the May groundwater sampling event. Groundwater laboratory analytical results are provided in Appendix B, *Supporting Documents*.

To reasonably ensure the purity of AEG's samples, the following actions were taken (1) nitrile gloves were used in handling all sampling jars and sampling devices; (2) the sampling equipment was scrubbed with Alconox detergent and rinsed with water prior to each sample extracted; and (3) the containers were then placed in a chilled cooler and transported under a chain-of-custody to Libby Environmental, a Washington State certified analytical laboratory located in Olympia, Washington.

2.4 Quality Controls

All soil and groundwater samples were collected in general accordance with industry protocols for the collection, documentation, and handling of samples. Descriptions of soil and sampling depths were carefully logged in the field, and the driller, excavator and geologist confirmed sample depths as soil samples were collected. Boring and test pit location maps were completed prior to leaving the Site to document sampling locations.

Soil samples were tightly packed into jars to eliminate sample headspace. Water samples were filled carefully in the sampling bottles to prevent volatilization. Upon sampling, all samples were placed immediately into chilled ice chests.

All samples were transported and submitted under standard chain-of-custody protocols and remained refrigerated until delivery to the respective analytical laboratory. The laboratories provided standard quality assurance/quality control (QA/QC) which included the following: surrogate recoveries for each sample, method blank results, duplicate analyses, matrix or blank spiked analyses, and duplicate spiked analyses.

2.5 Investigation Derived Waste

Investigation derived waste for this project consisted of soil cuttings from the subsurface exploration activities at the Site and vicinity area via boring procedures, decontamination water from decontamination of the augers and associated equipment, purge water, and discarded groundwater from the peristaltic pump. Soil cuttings from test pit excavations were used to backfill all pits. Boring and groundwater wastes were separated and placed in Washington State Department of Transportation (DOT) approved 30-gallon and 55-gallon steel drums. One 30-gallon drum containing soil cuttings and one 55-gallon drum containing decontamination

water/purge water were generated during these field services. The drums were stored onsite for subsequent characterization and disposal.

2.6 Monitoring Wells Survey

On May 19, 2009, all of the monitoring wells at the Site were surveyed to a NAD 83/91 horizontal and NAVD 88 vertical datum by licensed professional surveyors, Pacific Geomatic Services, Inc. of Mountlake Terrace, Washington, to ascertain the direction of shallow groundwater migration at the Site. Ground surface and top of casing elevations at each well were surveyed to the nearest 0.01 foot relative to an assigned benchmark.

The groundwater elevations were measured from the top of the PVC monitoring well casing (north side). Table 5, *Summary of Groundwater Elevations*, presents the depth-to-water at monitoring wells.

3. CONCLUSIONS AND RECOMMENDATIONS

The findings and conclusions derived during the Site Characterization for the Flegel property are as follows:

- Three monitoring wells, AEG MW-1 through AEG MW-3, were advanced and installed by AEG on May 13, 2009. AEG also completed 9 test pits exploration (TP-1 through TP-9) throughout the Site. Soil samples were collected from both borings (completed as monitoring wells) and test pits. Groundwater monitoring and sampling activities occurred on May 28, 2009.

- The locations of the borings/monitoring wells as well as test pits were selected to evaluate the potential of migration of dissolved phase diesel and gasoline range petroleum hydrocarbons, priority pollutant metals, and VOC from offsite areas onto the Site, specifically from the H&H Diesel facility adjacent to the west of the Site.

- Subsurface conditions at the Site, at locations of investigation, generally consist of fill deposits. Fill deposits typically consisted of loose to medium dense black-gray silty sand with gravel or clay and local brick, metal and wood debris to approximately nine feet bgs. Fill deposits were also logged to 19 feet bgs, the maximum depth explored. Groundwater was encountered during subsurface investigation activities ranging from approximately 3 1/2 feet to 8 1/2 feet bgs. The nature of the soils in the water-bearing zones appears to range from loose to medium dense silty sand to silty sand with clay or gravel and wood debris.

- The static water level at the Site and adjoining locales ranged from approximately 1.55 feet to 5.65 feet bgs during groundwater monitoring/sampling activities on May 28, 2009.

- The direction of shallow groundwater migration at the Site during groundwater monitoring/sampling activities on May 28, 2009, is generally to the west and south with southwesterly components, based on surveyed groundwater elevation measurements (refer to Figure 4 and Table 5).

- Soil and groundwater samples were submitted for selective laboratory analysis of gasoline range TPH via NWTPH-Gx, diesel through mineral oil range TPH via NWTPH-D/Dx Extended, priority pollutant metals (including mercury, lead, cadmium, chromium and arsenic), VOC via EPA Methods 8260B, and semi-volatile organic compounds via EPA Method 8270.

- Soil analytical results indicate that the western area of the Site has been adversely impacted by diesel and heavy oil range TPH in particular in the area and vicinity of well AEG MW-3, and test pits TP-6 and TP-8. The subsurface depths of approximately three to eight feet bgs appear to be impacted; however, only a heavy oil range TPH detection at three feet bgs at boring AEG MW-3 exhibited a detection above Ecology MTCA Method A soil cleanup level. The detection, at 13,000 milligrams per kilogram (mg/Kg), is above Ecology's cleanup level of 2,000 mg/Kg (refer to Table 1 and Figures 3 and 4). Boring AEG MW-3 is located at the western property boundary of the Site, adjacent to the former diesel oil aboveground storage tank at the H&H Diesel property.

- Additionally, diesel range TPH (at 500 mg/Kg) was detected at boring AEG MW-2 (located in the southern area of the Site). This detection is below the cleanup level of 2,000 mg/Kg.

- Gasoline range TPH was detected only at one location, TP-7 in the western area of the Site at six feet bgs. However, the detection (at 25 mg/Kg) is below Ecology MTCA Method A cleanup level of 100 mg/Kg, without the presence of benzene in soil.

- With respect to priority pollutant metals, areas throughout the Site from approximately three feet to eight fee bgs exhibited various detections of total lead, chromium, and arsenic, in particular in the west (AEG MW-3, TP-5, and TP-8), south (TP-2), and east (TP-4) of the Site. The elevated detections of metals included the following: total lead (290 mg/Kg) at AEG MW-3 at three feet bgs; chromium (ranging from 21 mg/Kg to 140 mg/Kg) at TP-2, TP-8, and AEG MW-3 at three feet to five feet bgs; and arsenic (21 mg/Kg) at AEG MW-3 at three feet bgs. Ecology MTCA Method A soil cleanup levels for total lead is 250 mg/Kg and arsenic at 20 mg/Kg. Laboratory analysis for chromium is analyzed as total chromium with the cleanup level of 19 mg/Kg for chromium VI and 2,000 mg/Kg for chromium III. Further laboratory analysis of the soil samples is necessary in order to differentiate the type of chromium present in soil.

- Groundwater analytical results indicate no detectable concentrations of gasoline range TPH at all monitoring wells onsite (inclusive of AEG MW-1 through AEG MW-3 and ADAPT MW-2). However, an elevated detection (at 700 micrograms per liter – ug/L) of diesel range TPH was exhibited at well AEG MW-3. This well is located at the western property boundary of the Site, adjacent to the former diesel oil aboveground storage tank at the H&H Diesel property.

- Select constituents of gasoline associated VOC including BTEX constituents and homologues of toluene were exhibited at wells AEG MW-1 and AEG MW-3, located in

the northwestern and western area of the Site. However, these detections are either not above Ecology MTCA Method A groundwater cleanup levels or Method A cleanup levels have not been designated for these constituents (refer to Table 4).

- Groundwater at wells AEG MW-1 through AEG MW-3 is adversely impacted by elevated detections of arsenic (ranging from 20.4 ug/L to 102 ug/L). The MTCA Method A groundwater cleanup level for arsenic is 5 ug/L. An elevated detection of total lead was exhibited at AEG MW-2 while chromium was detected at all three wells albeit at concentrations below groundwater cleanup levels (refer to Table 3).

Discussion:

The detections of diesel range TPH in soil at borings AEGMW-3, AEGMW-2, TP-6, TP-7, TP-8 and in groundwater at monitoring well AEGMW-3 were not unexpected due to previous detections of diesel range TPH at these locales by previous environmental investigations. In our professional opinion, the current and previous detections of diesel range TPH in soil during AEG's investigation and previous investigations are most likely associated with the Site's proximity to H&H Diesel and the known waste oil tank leak on that property.

The detections of VOC constituents typically associated with gasoline range TPH in soil (at TP-3 and TP-7 – namely toluene and total xylenes) and in groundwater (at monitoring well AEG MW-3) have not been exhibited in past environmental investigations. However, these VOC detections may be associated with the lightest range of diesel hydrocarbons, possibly with chains lengths from carbon C8 to carbon C12. Diesel range TPH has been documented at the Site during previous and current investigation. However, the VOC detections may also be associated with the Site's current use as a truck parking area and the proximity to the H&H Diesel property.

The detection of metals (specifically total lead, chromium (VI/III) and arsenic) throughout the Site in both soil and groundwater has been a recognized environmental concern and a focus of previous environmental investigations. The presence of metals, at locations of investigation, is most likely associated with the presence of fill at the Site. Fill was encountered in boring AEGMW-1 up to a depth of 19 feet bgs, the deepest location explored at the Site. Similarly, groundwater samples from wells AEGMW-1, AEGMW-2 and AEGMW-3 exhibited presence of these heavy metals at concentrations above Ecology MTCA Method A groundwater cleanup levels for total lead and particularly arsenic (refer to Table 3). While the levels of lead and arsenic found at the Site in soil are above Ecology's MTCA Method A soil cleanup levels, they are not egregiously so. Lead and arsenic, are commonly found in areas with past commercial and industrial uses, in particular at refineries, smelters, and at manufacturing, construction, and chemical industries. Background levels of these metals are typically found in certain glacial and

volcanic terrains throughout western Washington tend to have concentrations far above the national average.

The direction of shallow groundwater flow at the Site, based on surveyed groundwater elevations, is generally to the west and south with southwesterly components. Localized groundwater flow at the Site appears to reflect that of the regional groundwater flow where the flow appears to be generally to the west, towards the Hylebos Waterway (Commencement Bay) located aprpximately 1 to 1 1/4 miles to the west, and/or to the south, towards Hylebos Creek which is directly west of the Site and discharges to areas south of the Site towards the Hylebos Waterway. Seasonal fluctuations, shallow depth-to-water, and temporal changes in the groundwater may impact the quality of the groundwater and detections of constituents of concern. Therefore, a representative assessment of the quality of the groundwater needs to be evaluated over a period of four quarterly groundwater monitoring/sampling events (i.e., one calendar year).

Recommendations:
AEG recommends conducting quarterly groundwater monitoring and sampling activities at the Site for a total of four quarterly events in order to achieve the following:

- Representative understanding of the groundwater quality condition and its changes over a period of several quarters;
- Monitor and evaluate the primary constituent of concern at the Site including gasoline range TPH, diesel and heavy oil range TPH, gasoline associated VOC constituents, heavy metals (in particular total lead, chromium, and arsenic); and
- Evaluate the hydrogeologic regime in this area as it pertains to the direction of shallow groundwater migration and the nature of the shallow aquifer zones in this area.

Predominant areas of the Site are adversely impacted by heavy metals including total lead, chromium and arsenic. AEG recommends excavation at these areas to at least 14 feet bgs to remove and dispose offsite of metal impacted soil. This depth would include presence of artificial fill logged at these locales. Confirmation soil samples will need to be collected to ensure that the remaining soil has either detections below MTCA Method A soil cleanup levels or no detectable concentrations of heavy metals.

The source removal of impacted soil would potentially decrease the likelihood of ongoing (future) metal groundwater contamination. Excavation of metal contamination is the most expeditious and efficient cleanup method since heavy metals do not biodegrade nor attenuate over a period of time.

Other cleanup methods for metal impacted groundwater include groundwater filtering and/or pump and treat technologies.

4. 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. Dusty Flegel 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 completed. 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.

5. REFERENCES

American Society for Testing and Materials (ASTM) Standard E 1903-97, *Standard Guide Environmental Site Assessments: Phase II Environmental Site Assessment Process.*

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Walsh, T.J., Korosec, M.A., et al, 1987. *Geologic Map of Washington, Southwest Quadrant*, Washington Division of Geology and Earth Resources Geologic Map GM-34.

Washington State Department of Ecology, 2000. H&H Diesel Site Investigation and Cleanup Letter.

FIGURES

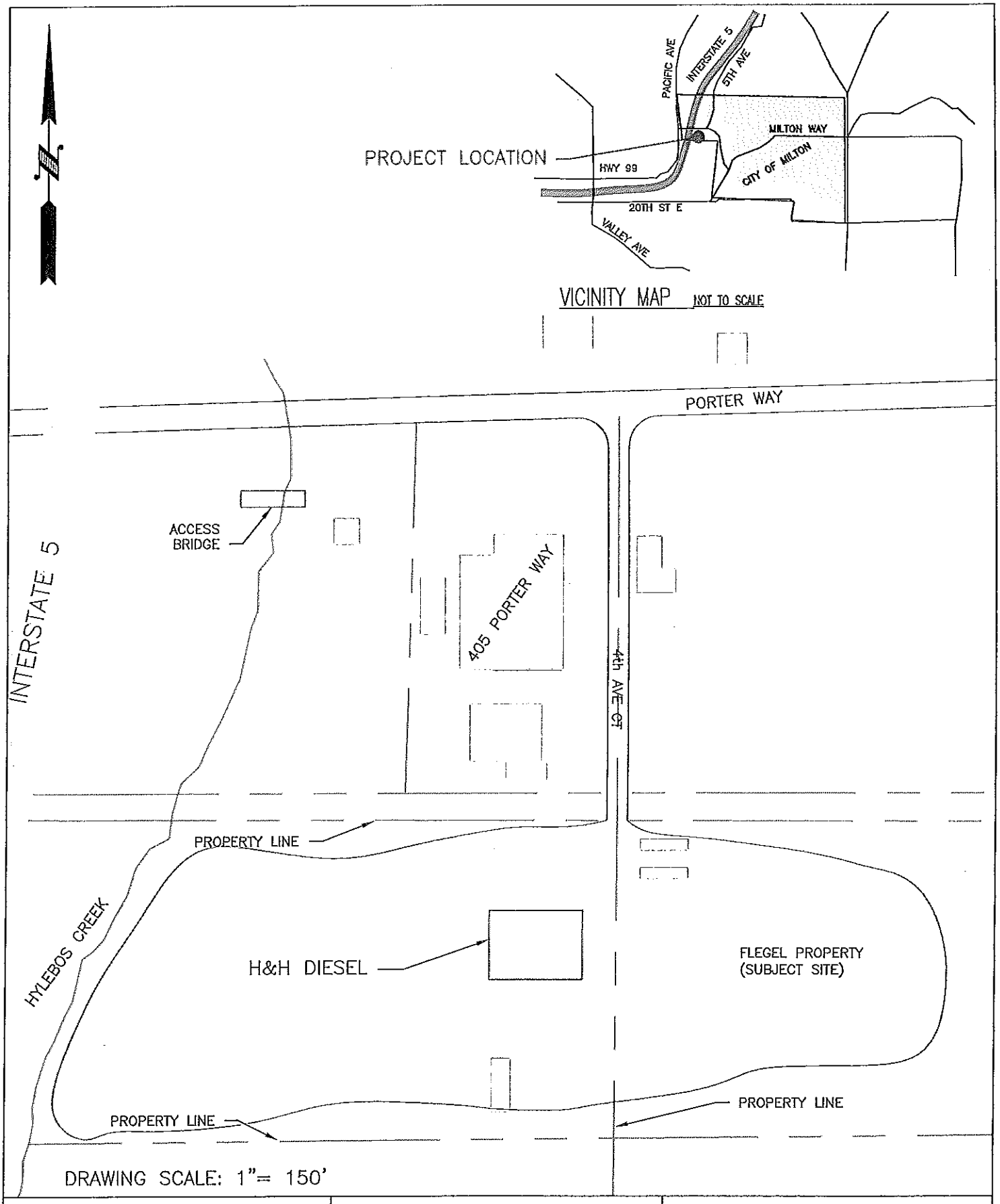

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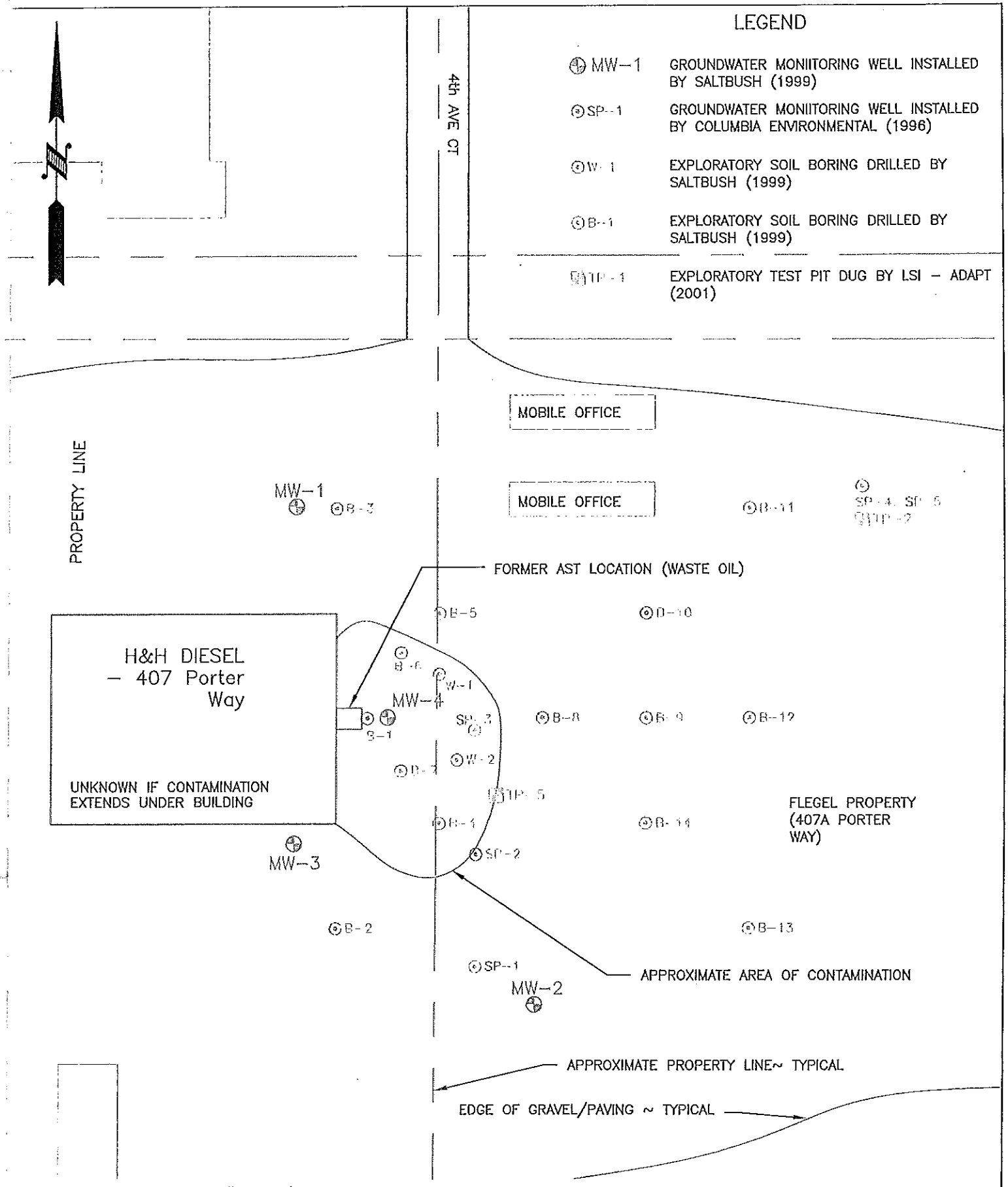
FIGURE 1

SITE & VICINITY MAP

FLEGEL PROPERTY
407 PORTER WAY
MILTON, WA

Project# 07-200	Date: 4/14/09
File:	Sheet 1 OF 2



DRAWING SCALE: 1"= 50'

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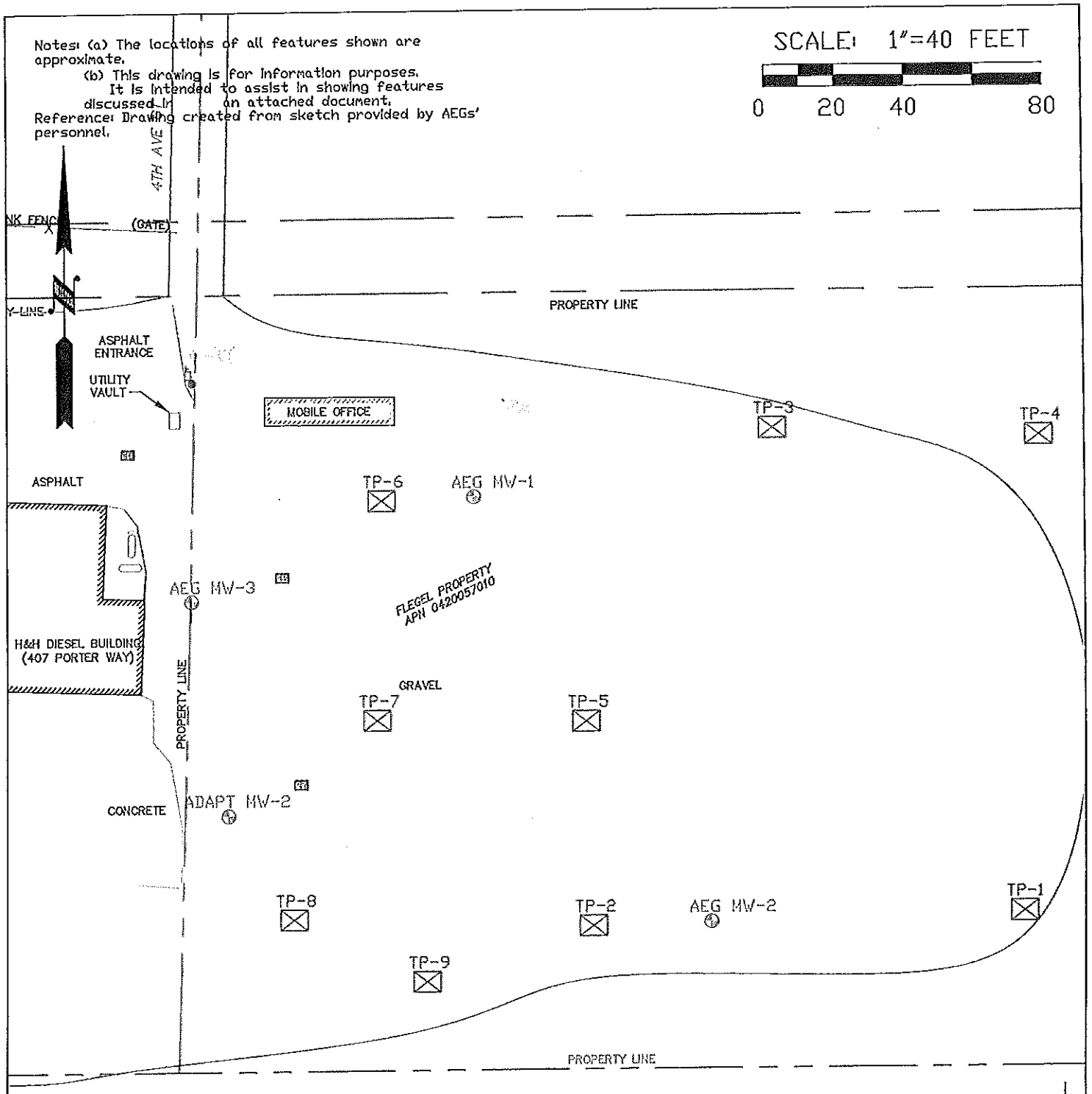
FIGURE 2 – PREVIOUS ENVIRONMENTAL INVESTIGATIONS

FLEGEL/H&H PROPERTIES
407A & 407 PORTER WAY
MILTON, WA

Project# 07-200	Date: 4/14/2009
File:	Sheet 1 OF 1



LEGEND

MW-1 GROUNDWATER MONITORING WELL (AEG 2009)

ADAPTMW-2 GROUNDWATER MONITORING WELL(SALTBUSH 1999)

TP-1 TEST PIT (AEG 2009)

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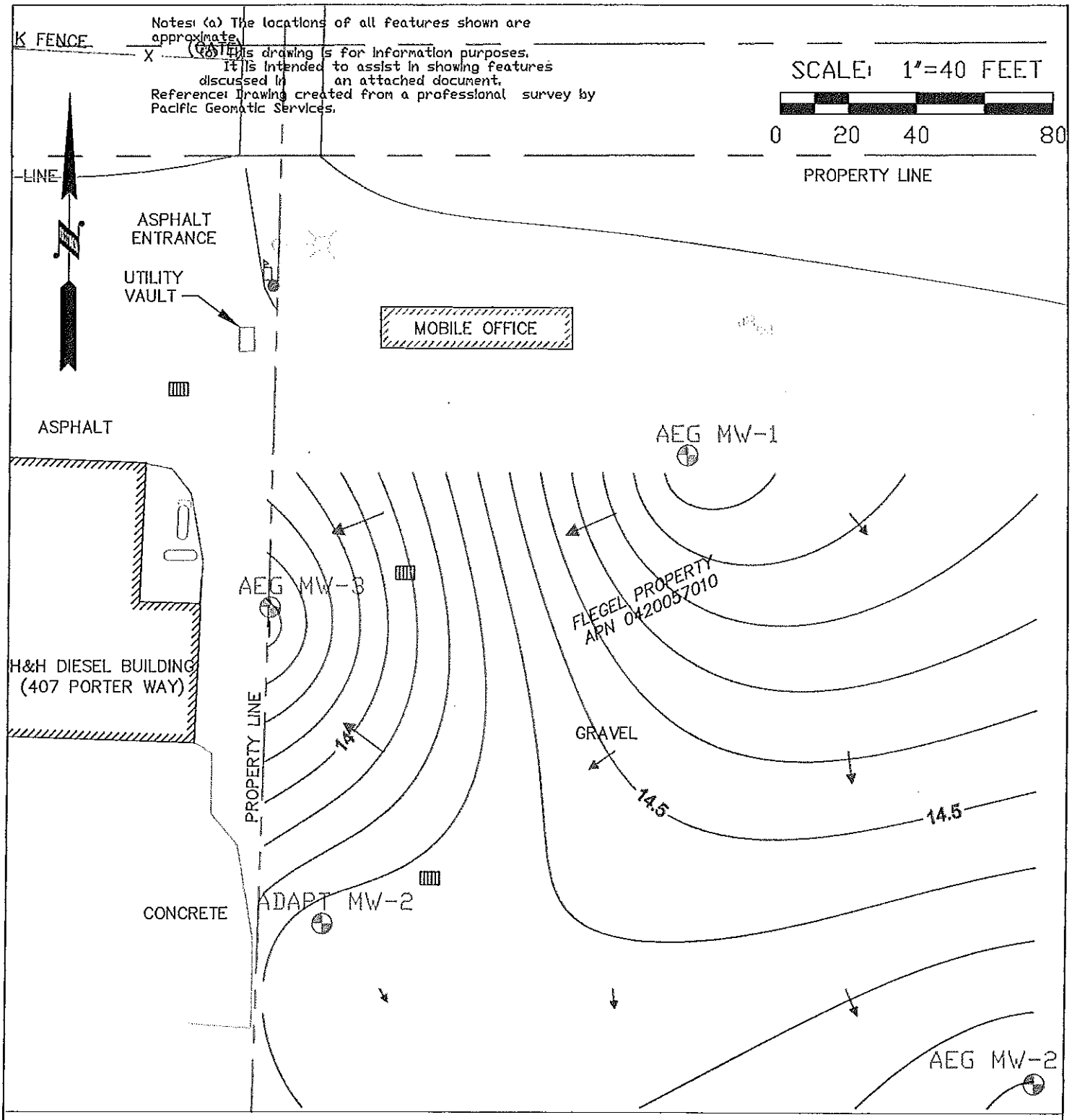
FIGURE 3

TEST PITS SITE PLAN

FLEGEL/H&H PROPERTIES
407A & 407 PORTER WAY
MILTON, WA

Project# 07-200	Date: 4/14/2009
File:	Sheet 1 OF 1



AEG MW-1 GROUNDWATER MONITORING WELL (AEG 2009)

ADAPTMW-2 GROUNDWATER MONITORING WELL(SALTBUSH 1999)

INFERRED GROUNDWATER FLOW DIRECTION

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FIGURE 4

GROUNDWATER CONTOUR MAP

FLEGEL/H&H PROPERTIES
407A & 407 PORTER WAY
MILTON, WA

Project# 07-200	Date: 6/09/09
File: FLEGEL	Sheet 1 OF 1

TABLES

Table 1 Summary of Soil Analytical Results - TPH, BTEX & Metals
Flegel Property
Milton, WA

Sample Number[1]	Sample Depth (feet)	Date Sampled	Gasoline TPH[2] (mg/Kg)	Select Volatile Organic Compounds[3] (mg/Kg)				Diesel Extended TPH[4] (mg/Kg)		MTCA 5 Metals[5] (mg/Kg)				
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Diesel	Heavy Oil	Mercury	Lead	Cadmium	Chromium VI/III[6]	Arsenic
AEG MW1-S1-3	3	5/13/09	--	--	--	--	--	<50	<100	--	--	--	--	--
AEG MW1-S2-8	8	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
AEG MW1-S3-15	15	5/13/09	--	--	--	--	--	<50	<100	--	--	--	--	--
AEG MW2-S4-3	3	5/13/09	--	--	--	--	--	500	<100	--	--	--	--	--
AEG MW2-S5-10	10	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
AEG MW3-S6-3	3	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	200	**13,000**	<0.5	**290**	<1.0	**140**	**21**
AEG MW3-S7-8	8	5/13/09	--	--	--	--	--	<50	200	--	--	--	--	--
AEG MW3-S8-12	12	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
TP1-5	5	5/13/09	--	--	--	--	--	<50	<100	--	--	--	--	--
TP1-8	8	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
TP2-5	5	5/13/09	--	--	--	--	--	--	--	<0.5	72	<1.0	**28**	8.4
TP4-8	8	5/13/09	<10	<0.02	<0.05	0.07	<0.15	--	--	<0.5	13	<1.0	15	5.7
TP5-6	6	5/13/09	--	--	--	--	--	<50	<100	--	--	--	--	--
TP6-3	3	5/13/09	--	--	--	--	--	<50	520	<0.5	42	<1.0	18	6.5
TP6-8	8	5/13/09	--	--	--	--	--	<50	130	--	--	--	--	--
TP7-6	6	5/13/09	25	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
TP8-3	3	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	<50	<100	<0.5	67	<1.0	**21**	19
TP8-7	7	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	<50	460	--	--	--	--	--
TP9-8	8	5/13/09	<10	<0.02	<0.05	<0.05	<0.15	--	--	--	--	--	--	--
MDL			10	0.02	0.05	0.05	0.15	50	100	0.50	5.0	1.0	5.0	5.0
Ecology MTCA Method A Clean Up Levels			100	0.03	7	6	9	2,000	2,000	2	250	2	19/2,000	20

Notes:
[1]Approximate Sample locations are shown in figure 2
[2]Gasoline range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method TPH-Gx.
[3]Select Volatile Organic Compounds. Analyzed by EPA Method 8260B.
[4]Diesel extended range TPH. Analyzed by Northwest Method NWTPH-D/Dx
[5]Analyzed by EPA Method 6020
[6]Soil cleanup level for Chromium VI is 19 mg/Kg & Chromium III is 2,000 mg/Kg
mg/Kg - milligrams per Kilogram

-- = not analyzed for constituent
< = not detected above laboratory limits
* Ecology has not designated a cleanup level for this constituent
MDL = Method Detection Limits
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup levels

Table 2 Summary of Soil Analytical Results - Selected VOC & Semi-VOC
Flegel Property
Milton, WA

Sample Number[1]	Sample Depth (feet)	Date Sampled	Select Volatile Organic Compounds[2] (mg/Kg)								Select Semi-Volatile Organic Compounds[3] (mg/Kg)		
			Benzene	Toluene	Ethylbenzene	Total Xylenes	PCE	TCE	Vinyl Chloride	Acetone	Benzo(a)pyrene	Phenol	Fluorene
AEG MW2-S5-10	10	5/13/09	<0.02	<0.05	<0.05	<0.15	<0.02	<0.02	<0.05	1.7	<0.1	1.00	<0.1
AEG MW3-S7-8	8	5/13/09	<0.02	<0.05	<0.05	<0.15	<0.02	<0.02	<0.05	<250	<0.1	1.00	<0.1
TP3-8	8	5/13/09	<0.02	23	<0.05	<0.15	<0.02	<0.02	<0.05	1.1	<0.1	1.00	<0.1
TP5-6	6	5/13/09	<0.02	<0.05	<0.05	<0.15	<0.02	<0.02	<0.05	<250	<0.1	1.00	<0.1
TP7-3	3	5/13/09	<0.02	<0.05	<0.05	<0.15	<0.02	<0.02	<0.05	<250	<0.1	1.00	<0.1
TP8-7	7	5/13/09	<0.02	<0.05	<0.05	<0.15	<0.02	<0.02	<0.05	1.6	<0.1	1.00	<0.1
MDL			0.02	0.05	0.05	0.15	0.02	0.02	0.05	0.25	0.1	1.00	0.1
Ecology MTCA Method A Clean Up Levels			0.03	7	6	9	0.05	0.03	*	*	*	*	*

Notes:
[1]Approximate Sample locations are shown in figure 2
[2]Analyzed by EPA Method 8260B
[2]Analyzed by EPA Method 8270
mg/Kg - milligrams per Kilogram
PCE = tetrachloroethylene
TCE = trichloroethylene
MDL = Method Detection Limits
-- = not analyzed for constituent
< = not detected above laboratory limits
* Ecology has not designated a cleanup level for this constituent
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level.

Table 3 Summary of Groundwater Analytical Results - TPH & Metals
Flegel Property
Milton, WA

Sample Number[1]	Date Sampled	Gasoline TPH[2] (ug/L)	Diesel Extended TPH[3] (ug/L)			MTCA 5 Metals[4] (ug/L)				
			Diesel	Heavy Oil	Mineral Oil	Mercury	**Lead**	Cadmium	Chromium Total[6]	**Arsenic**
AEG MW1-W	5/28/09	<100	<200	<400	<400	<0.5	6.6	<1.0	<10	**50.9**
AEG MW2-W	5/28/09	<100	<200	<400	<400	<0.5	**40.7**	<1.0	27.7	**102**
AEG MW3-W	5/28/09	<100	**700**	<400	<400	<0.5	<5	<1.0	7.8	**20.4**
ADAPT MW2-W	5/28/09	<100	<200	<400	<400	<0.5	<5	<1.0	<10	<5
PQL		100	200	400	400	0.5	5	1	10	5
Ecology MTCA Method A Clean Up Levels		800[5]	500	500	500	2	15	5	50	5

Notes:
[1]Approximate Sample locations are shown in figure 2
[2]Gasoline range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Gx.
[3]Diesel extended range TPH. Analyzed by Northwest Method NWTPH-D/Dx
[4]Analyzed by EPA Method 7000 Series
[5]Cleanup level with presence of benzene
[6]If detection exceeds groundwater cleanup level for total chromium, then the type of chromium needs to be differentiated.
ug/L= micrograms per liter

-- = not analyzed for constituent
< = not detected above laboratory limits
* Ecology has not designated a cleanup level for this constituent
PQL = Practical Quantitation Limits
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup levels

Table 4 Summary of Groundwater Analytical Results - Selected VOC
Flegel Property
Milton, WA

Sample Number[1]	Date Sampled	Select Volatile Organic Compounds[2] (ug/L)											
		Benzene	Toluene	Ethylbenzene	Total Xylenes	1,3,5 Trimethylbenzene	Isopropylt oluene	1,2-Dichloroethane (EDC)	1,2-Dibromoethane (EDB)	Napthalenes	PCE	TCE	Vinyl Chloride
AEG MW1-W	5/28/09	<1	14.3	<1	<3	<1	<1	<1	<0.01	7.7	<1	<1	<0.20
AEG MW2-W	5/28/09	<1	<1	<1	<3	<1	<1	<1	<0.01	<5	<1	<1	<0.20
AEG MW3-W	5/28/09	1.50	11.1	6.5	54.5	37.4	10.8	<1	<0.01	89.2	<1	<1	<0.20
ADAPT MW2-W	5/28/09	<1	<1	<1	<3	<1	<1	<1	<0.01	<5	<1	<1	<0.20
PQL		1	1	1	3	1	1	1	0.01	5	1	1	0.2
Ecology MTCA Method A Clean Up Levels		5	1,000	700	1,000	*	*	5	0.01	160	5	5	0.2

Notes:
[1]Approximate Sample locations are shown in figure 3
[2]Select Volatile Organic Compounds. Analyzed by EPA Method 8260B.
ug/L= micrograms per liter
PCE = tetrachloroethylene
TCE = trichloroethylene
DCE = dichloroethylene
< = not detected above laboratory limits
* Ecology has not designated a cleanup level for this constituent
PQL = Practical Quantitation Limits
Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level.

Table 5 Summary of Groundwater Elevations
Flegel Property
Milton, WA

Well Number/ TOC Elevation (feet)	Date of Measurement	DTW (feet)	DT LPH (feet)	LPH (feet)	GW Elevation (feet)	Change in GW Elevation (feet)
AEG MW-1 16.62	05/28/09	1.55	--	--	15.07	--
AEG MW-2 19.71	05/28/09	5.65	--	--	14.06	--
AEG MW-3 16.03	05/28/09	2.49	--	--	13.54	--
ADAPTMW-2 16.00	05/28/09	1.60	--	--	14.40	--

Notes:
TOC = Top of casing elevation relative to assigned benchmark.
DTW = Depth to water below top of casing.
DT LPH = Depth to liquid phase hydrocarbons (i.e., free product)
LPH = Liquid phase hydrocarbons thickness.
GW Elevation = Groundwater Elevation
-- = Not measured, not available, or not applicable

Table 6 Summary of Groundwater Natural Attenuation Parameters
Flegel Property
Milton, WA

Well Number	Date Analyzed	pH	Conductivity (mS/cm)	TDS (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	Salinity (%)
AEGMW-1	5/27/09	6.76	0.80	0.00	0.19	13.49	0.40
AEGMW-2	5/27/09	7.11	1.48	0.00	0.19	12.56	0.75
AEGMW-3	5/27/09	7.04	1.62	0.00	0.22	13.69	0.82
ADAPTMW-2	5/27/09	6.94	2.27	0.00	0.16	13.80	1.17

Notes:
TDS=total dissolved solids
-- = Not measured, not available, or not applicable

APPENDIX A
SITE PHOTOGRAPHS

ASSOCIATED
ENVIRONMENTAL
GROUP, LLC

SITE PHOTOGRAPHIC RECORD

Project No.: 07-200

Project Name: Flegel Property – Site Characterization

Photo #1:	View of direct push probe at boring AEGMW-1, on the north-central area of the Site. Picture taken facing northwest.

Photo #2:	View of direct push probe at boring AEGMW-2, on the southeast area of the Site. Picture taken facing west.

Photo #3:	View of direct push probe at boring AEGMW-3, adjacent to the H&H Diesel Property near the property boundary. Picture taken facing south.

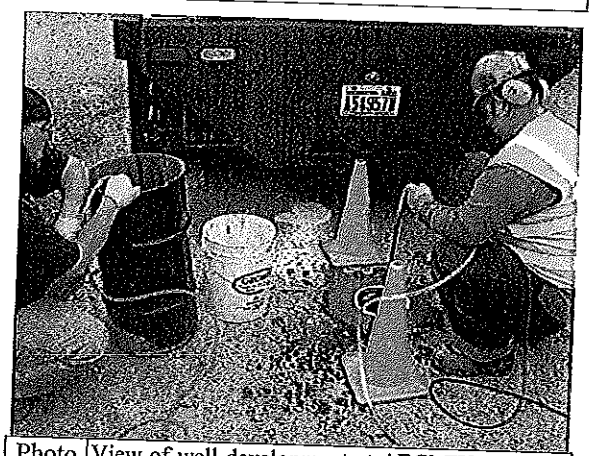

Photo #4:	View of well development at AEGMW-3. Wells were purged with a sediment pump until the water became clear and free of sediment.

Photo #5:	View of the excavation of TP-2. Picture taken facing east-southeast. Note the cones for AEGMW-2 in the background.

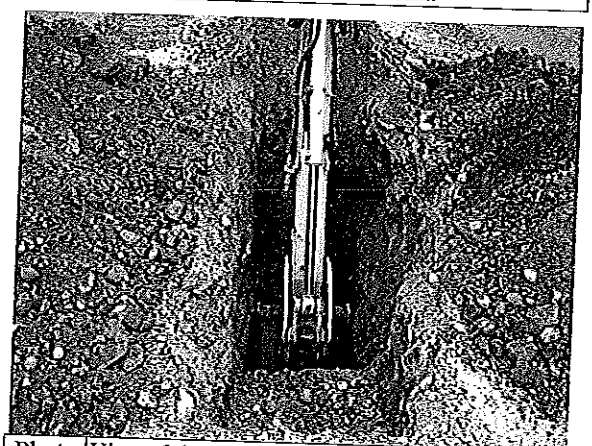

Photo #6:	View of the excavation of TP-5. Note the typical fill found at the Site. Excavations were generally 2 ½ to 3 feet wide and 7 ½ to 7 feet long with depths ranging from 7 to 9 feet bgs.

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ASSOCIATED
ENVIRONMENTAL
GROUP, LLC

SITE PHOTOGRAPHIC RECORD

Project No.: 07-200

Project Name: Flegel Property – Site Characterization

Photo #7:	View of the excavation of TP-7. Note the presence of a large amount of wood debris in the fill material found at the Site.

Photo #8:	View of the excavation material from TP-8. Disturbed soil samples were uniformly collected from the central-rear portion of the bucket.

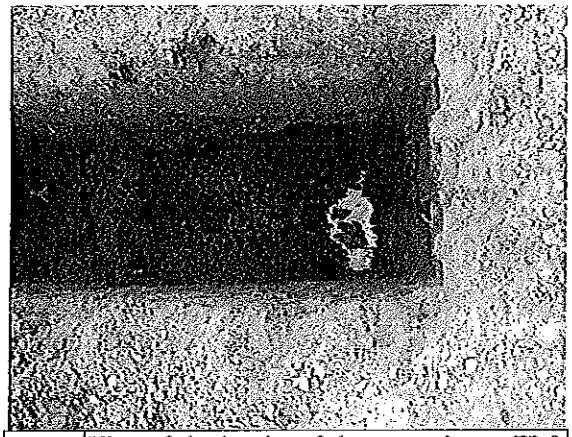

Photo #9:	View of the interior of the excavation at TP-8. Note the water seeping into the bottom of the excavation has a visible sheen.

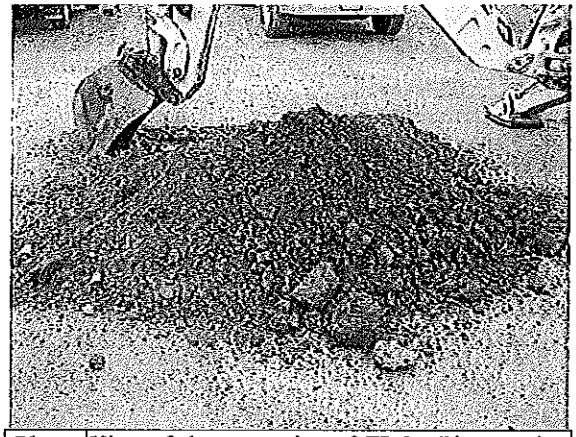

Photo #10:	View of the excavation of TP-9. Picture taken facing south.

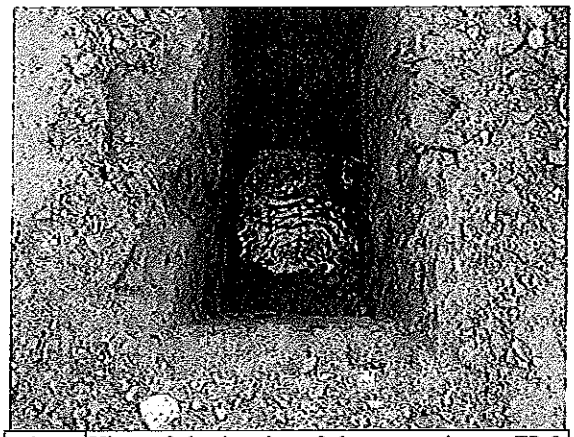

Photo #11:	View of the interior of the excavation at TP-9. Water seepage was typically seen around 8 feet bgs. Note the water has no visible sheen.

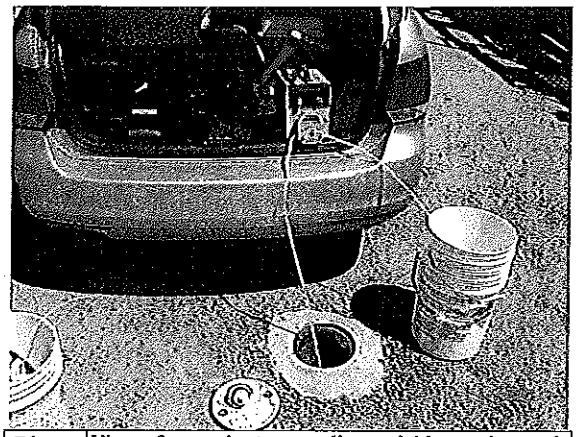

Photo #12:	View of groundwater sampling activities at the newly constructed AEGMW-1. Low-flow purge via a peristaltic pump and dedicated polyethylene tubing was utilized.

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APPENDIX B
SUPPORTING DOCUMENTS

BORING LOGS

ASSOCIATED ENVIRONMENTAL GROUP, LLC

LOG OF BOREHOLE

PROJECT:	Flegel	**JOB #** 07-200	**BORING #** AEG MW-1 PAGE 1 OF 1
Location:	Milton, WA	**Approximate Elevation:**	
Subcontractor/Equipment:	NW Probe	**Drilling Method:**	Push Probe
Date	5/13/2009	**Logged By:**	K. Roslund

Depth (ft)	Soil Description	Unified Soil Symbol	Sample Type	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Monitoring Well
	Gravel fill, underlain by				AEGMW1-S1-3	750	N.A.	12.2	Not observed	
5	Black fiberous organic material with CLAY, no odor present	OL			AEGMW1-S2-8					
10		OH								
15	Light to medium Brown, Tan organic material with moist, stiff CLAY	OH			AEGMW1-S3-15	850				
20	Boring completed at 19 feet Well completed to 13 feet 10' screen, 12' sand, 1' bentonite Groundwater Encountered ~8 feet bgs Ecology Well Tag Number BCS 947									
25										

Explanation

- 2-inch O.D. split spoon sample
- No Recovery
- Contact located approximately
- ATD — Groundwater level at time of drilling or date of measurement

Monitoring Well
- Clean Sand
- Bentonite
- Grout/Concrete
- Screened Casing
- Blank Casing

ASSOCIATED ENVIRONMENTAL GROUP, LLC

LOG OF BOREHOLE

PROJECT:	Flegel	**JOB #** 07-200	**BORING #** AEG MW-2 **PAGE 1 OF 1**
Location:	Milton, WA	**Approximate Elevation:**	
Subcontractor/Equipment:	NW Probe	**Drilling Method:** Push Probe	
Date	5/13/2009	**Logged By:** K. Roslund	

Depth (ft)	Soil Description	Unified Soil Symbol	Sample Type	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Monitoring Well
						953	N.A.		Not	
								10.2	observed	
	Gravel, interbedded gray SAND with silt with wood fibers, brick, glass, cement - (FILL)	SM			AEGMW2-S4-3	1011				
5										
10					AEGMW2-S5-10	1011				
	Probing becomes difficult									
	Boring completed at 13 feet Well completed to 13 feet 10' screen, 12' sand, 1' bentonite Groundwater Encountered ~9 feet bgs									
15										
	Ecology Well Tag Number BCS 948									
20										
25										

Explanation

- 2-inch O.D. split spoon sample
- No Recovery
- Contact located approximately
- ATD — Groundwater level at time of drilling or date of measurement

Monitoring Well

- Clean Sand
- Bentonite
- Grout/Concrete
- Screened Casing
- Blank Casing

ASSOCIATED ENVIRONMENTAL GROUP, LLC

LOG OF BOREHOLE

PROJECT:	Flegel	**JOB #** 07-200	**BORING #** AEG MW-3 **PAGE 1 OF 1**
Location:	Milton, WA	**Approximate Elevation:**	
Subcontractor/Equipment:	NW Probe	**Drilling Method:** Push Probe	
Date	5/13/2009	**Logged By:** K. Roslund	

Depth (ft)	Soil Description	Unified Soil Symbol	Sample Type	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Monitoring Well
							N.A.			
						1059				
	Interbedded gray-black sandy GRAVEL with silt, moist at 3 feet bgs, wood fibers and tan CLAY to 14 feet bgs (FILL)	GM			AEGMW3-S6-3			55.5		
5	Oily sheen on sample tube from ~3 feet to 13 feet bgs with slight odor									
					AEGMW3-S7-8				Sheen observed	
10										
					AEGMW3-S8-12					
						1150				
15	Boring completed at 14 feet Well completed to 13 feet 10' screen, 2' sand, 1' bentonite Groundwater Encountered ~8 feet bgs									
	Ecology Well Tag Number BCS 949									
20										
25										

Explanation

- 2-inch O.D. split spoon sample
- No Recovery
- Contact located approximately
- ATD — Groundwater level at time of drilling or date of measurement

Monitoring Well

- Clean Sand
- Bentonite
- Grout/Concrete
- Screened Casing
- Blank Casing

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-1
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Lots of garbage in the fill - wood debris, rubber, cement
	2	
	3	
	4	
TP1-5	5	No water at 5 feet
	6	
	7	
TP1-8	8	Sample at 8 feet - 10:00
		Moisture at 8.5 feet - Still fill
	9	
	10	
	11	
	12	

Test pit depth: 8.5 feet bgs
Groundwater seepage observed at: 8.5 feet bgs
Selected soil sample: 5 feet bgs, 8 feet bgs
Caving obseved at:
NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-2
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Cobbles - Wood debris, brick, glass, ____ wood, floor tile, cement
	2	
	3	
	4	
TP2-5	5	
	6	Moist at 6 feet
	7	
TP2-8	8	Sample at 8 feet - Pit completed at 8 feet bgs
	9	
	10	
	11	
	12	

Test pit depth: 8 feet bgs
Groundwater seepage observed at: 8 feet bgs
Selected soil sample: 5 feet bgs, 8 feet bgs
Caving obseved at:
NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-3
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Black to Reddish/Brown fill with cobbles, brick, wood debris
	2	
	3	
	4	
TP3-5	5	
	6	
	7	
	8	
TP3-9	9	Pit completed to 9 feet - Dry at bottom with wood, fine material
	10	
	11	
	12	

Test pit depth: 9 feet bgs
Groundwater seepage observed at: None Observed
Selected soil sample: 5 feet bgs, 9 feet bgs
Caving obseved at:

NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-4
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Black to Reddish/Brown fill with cobbles, brick, wood debris
	2	
	3	
	4	
TP4-5	5	
	6	
	7	
TP4-8	8	Pit completed to 8 feet bgs - no groundwater present
	9	
	10	
	11	
	12	

Test pit depth: 8 feet bgs
Groundwater seepage observed at: None observed
Selected soil sample: 5 feet bgs, 8 feet bgs
Caving observed at:

NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-5
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Black - Gray fill, brick, tires, metal, cement
	2	
	3	
	4	
	5	PID at 5 feet bgs = 25.5
TP5-6	6	Pit completed to 6 feet bgs due to large timbers in the fill material
	7	
	8	
	9	
	10	
	11	
	12	

Test pit depth: 6 feet bgs
Groundwater seepage observed at: None observed
Selected soil sample: 6 feet bgs
Caving observed at:
NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-6
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	More fill, hubcaps, round timber, wood, see pictures
	2	
TP6-3	3	Sampled at 3 feet and 8 feet bgs 1245. PID at 3 feet = 62.6
	4	
	5	
	6	
	7	
TP6-8	8	Moist - Saturated ~ 8 feet bgs
	9	
	10	
	11	
	12	

Test pit depth: 8 feet bgs
Groundwater seepage observed at: 8 feet bgs
Selected soil sample: 3 feet bgs, 8 feet bgs
Caving observed at:
NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-7
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	More fill - very rough digging - Black/Red clay with cobbles and gravel, round wood timbers, concrete, bricks
	2	
TP7-3	3	Samples at 3 feet and 6 feet at moist to saturated, definite odor from 4 - 6 feet bgs PID at 3 feet bgs = 44.0
	4	
	5	
TP7-6	6	Test pit advanced to 6 feet bgs - large amount of wood material made for excavation refusal
	7	
	8	
	9	
	10	
	11	
	12	

Test pit depth: 6 feet bgs
Groundwater seepage observed at: 3-6 feet bgs
Selected soil sample: 3 feet bgs, 6 feet bgs
Caving observed at:

NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-8
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	More fill
	2	
TP8-3	3	Samples at 3 and 7 feet - Seeped water in pit has sheen definite odor from 5 to 7 feet bgs
		PID at 3 feet = 62.8
	4	
	5	
	6	
TP8-7	7	Visible sheen on seeping water.
	8	
	9	
	10	
	11	
	12	

Test pit depth: 7 feet bgs
Groundwater seepage observed at: 7 feet bgs
Selected soil sample: 3 feet bgs, 7 feet bgs
Caving observed at:

NOTES:

TEST PIT LOG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

TEST PIT NO. TP-9
LOCATION Milton, WA

DATE/TIME 5/13/2009
JOB NO. 05-200
GEOLOGIST K. Roslund

Sample No.	Depth	SOIL DESCRIPTION
	1	Black-Gray fill - silty SAND with gravel and cobbles. Large amount of organic material
	2	
	3	
	4	
	5	
	6	
	7	
TP9-8	8	Sampled at 8 feet - GW/Vadose zone interface, Slight odor from 6-8 feet, GW in pit bottom did not appear to have sheen
	9	
	10	
	11	
	12	

Test pit depth: 8 feet bgs
Groundwater seepage observed at: 8 feet bgs
Selected soil sample: 8 feet bgs
Caving observed at:

NOTES: All 3 new wells were purged of 10+ gallons each until water was clear of sediment.

SOIL ANALYTICAL RESULTS

ESN NORTHWEST
Environmental
Services Network

May 20, 2009

Michael Chun
Associated Environmental Group, Inc.
1728 NE State Avenue, Suite 101
Olympia, WA 98506

Dear Mr. Chun:

Please find enclosed the analytical data report for the Flegel Property Project in Milton, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended, Gasoline by NWTPH-Gx, VOC's by Method 8260, PAH SIMS by Method 8270, and MTCA 5 Metals by Method 6020 on May 15 – 20, 2009.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

ESN Northwest appreciates the opportunity to have provided analytical services to Associated Environmental Group, Inc. for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Stephen Loague
Lab Manager

1210 Eastside Street SE, Suite 200 ▪ Olympia, Washington 98501 ▪ 360.459.4670 ▪ FAX 360.459.3432
Web Site: *www.esnnw.com* E-Mail: *info@esnnw.com*

ESN NORTHWEST CHEMISTRY LABORATORY

AEG
FLEGEL PROPERTY PROJECT
Client Project #07-200
Milton, Washington

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Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8260) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	5/18/2009	nd	nd	nd	nd	nd	117
LCS	5/18/2009	106%	134%	159%	100%	---	108
AEG-MW1-S2-8	5/18/2009	nd	nd	nd	nd	nd	117
AEG-MW1-S2-8 DUP	5/18/2009	nd	nd	nd	nd	nd	120
AEG-MW2-S5-10	5/18/2009	nd	nd	nd	nd	nd	115
AEG-MW3-S6-3	5/18/2009	nd	nd	nd	nd	nd	117
AEG-MW3-S8-12	5/18/2009	nd	nd	nd	nd	nd	117
TP1-8	5/18/2009	nd	nd	nd	nd	nd	116
TP4-8	5/18/2009	nd	nd	**0.07**	nd	nd	115
TP7-6	5/18/2009	nd	nd	nd	nd	**25**	125
TP8-3	5/18/2009	nd	nd	nd	nd	nd	109
TP8-7	5/18/2009	nd	nd	nd	nd	nd	120
TP9-8	5/18/2009	nd	nd	nd	nd	nd	117
MS	5/15/2009	93%	115%	137%	107%	---	102
MSD	5/15/2009	94%	113%	133%	104%	---	104
Method Detection Limits		0.02	0.05	0.05	0.15	10	

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

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

ESN NORTHWEST CHEMISTRY LABORATORY

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Analytical Results

8260B, µg/kg (Soil)		MTH BLK	LCS	AEG-MW2-S5-10	AEG-MW3-S7-8	TP3-8	TP5-6
Date extracted	Reporting	05/14/09	05/14/09	05/14/09	05/14/09	05/14/09	05/14/09
Date analyzed	Limits	05/18/09	05/18/09	05/18/09	05/19/09	05/18/09	05/18/09
Dichlorodifluoromethane	50	nd		nd	nd	nd	nd
Chloromethane	50	nd		nd	nd	nd	nd
Vinyl chloride	50	nd		nd	nd	nd	nd
Bromomethane	50	nd		nd	nd	nd	nd
Chloroethane	50	nd		nd	nd	nd	nd
Trichlorofluoromethane	50	nd		nd	nd	nd	nd
Acetone	250	nd		**1,700**	nd	**1,100**	nd
1,1-Dichloroethene	50	nd	145%	nd	nd	nd	nd
Methylene chloride	20	nd		nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	50	nd		nd	nd	nd	nd
trans-1,2-Dichloroethene	50	nd		nd	nd	nd	nd
1,1-Dichloroethane	50	nd		nd	nd	nd	nd
2-Butanone (MEK)	250	nd		nd	nd	nd	nd
cis-1,2-Dichloroethene	50	nd		nd	nd	nd	nd
2,2-Dichloropropane	50	nd		nd	nd	nd	nd
Chloroform	50	nd		nd	nd	nd	nd
Bromochloromethane	50	nd		nd	nd	nd	nd
1,1,1-Trichloroethane	50	nd		nd	nd	nd	nd
1,2-Dichloroethane (EDC)	50	nd		nd	nd	nd	nd
1,1-Dichloropropene	50	nd		nd	nd	nd	nd
Carbon tetrachloride	50	nd		nd	nd	nd	nd
Benzene	20	nd	106%	nd	nd	nd	nd
Trichloroethene (TCE)	20	nd	108%	nd	nd	nd	nd
1,2-Dichloropropane	50	nd		nd	nd	nd	nd
Dibromomethane	50	nd		nd	nd	nd	nd
Bromodichloromethane	50	nd		nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	250	nd		nd	nd	nd	nd
cis-1,3-Dichloropropene	50	nd		nd	nd	nd	nd
Toluene	50	nd	134%	nd	nd	**23,000**	nd
trans-1,3-Dichloropropene	50	nd		nd	nd	nd	nd
1,1,2-Trichloroethane	50	nd		nd	nd	nd	nd
2-Hexanone	250	nd		nd	nd	nd	nd
1,3-Dichloropropane	50	nd		nd	nd	nd	nd
Dibromochloromethane	50	nd		nd	nd	nd	nd
Tetrachloroethene (PCE)	20	nd		nd	nd	nd	nd
1,2-Dibromoethane (EDB)	50	nd		nd	nd	nd	nd
Chlorobenzene	50	nd	130%	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	50	nd		nd	nd	nd	nd
Ethylbenzene	50	nd		nd	nd	nd	nd
Xylenes	150	nd		nd	nd	nd	nd
Styrene	50	nd		nd	nd	nd	nd
Bromoform	50	nd		nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	50	nd		nd	nd	nd	nd
Isopropylbenzene	50	nd		nd	nd	nd	nd
1,2,3-Trichloropropane	50	nd		nd	nd	nd	nd
Bromobenzene	50	nd		nd	nd	nd	nd

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Analytical Results

8260B, µg/kg (Soil)		MTH BLK	LCS	AEG-MW2-S5-10	AEG-MW3-S7-8	TP3-8	TP5-6
Date extracted	Reporting	05/14/09	05/14/09	05/14/09	05/14/09	05/14/09	05/14/09
Date analyzed	Limits	05/18/09	05/18/09	05/18/09	05/19/09	05/18/09	05/18/09
n-Propylbenzene	50	nd		nd	nd	nd	nd
2-Chlorotoluene	50	nd		nd	nd	nd	nd
4-Chlorotoluene	50	nd		nd	nd	nd	**76**
1,3,5-Trimethylbenzene	50	nd		nd	nd	nd	nd
tert-Butylbenzene	50	nd		nd	nd	nd	nd
1,2,4-Trimethylbenzene	50	nd		nd	nd	nd	nd
sec-Butylbenzene	50	nd		nd	nd	nd	nd
1,3-Dichlorobenzene	50	nd		nd	nd	nd	nd
1,4-Dichlorobenzene	50	nd		nd	nd	nd	nd
Isopropyltoluene	50	nd		nd	nd	**1,000**	**61**
1,2-Dichlorobenzene	50	nd		nd	nd	nd	nd
n-Butylbenzene	50	nd		nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	50	nd		nd	nd	nd	nd
1,2,4-Trichlorobenzene	50	nd		nd	nd	nd	nd
Naphthalene	50	nd		nd	nd	nd	nd
Hexachloro-1,3-butadiene	50	nd		nd	nd	nd	nd
1,2,3-Trichlorobenzene	50	nd		nd	nd	nd	nd
Surrogate recoveries							
Dibromofluoromethane		93%	96%	94%	113%	96%	98%
Toluene-d8		137%	132%	123%	117%	117%	121%
4-Bromofluorobenzene		117%	108%	115%	123%	125%	125%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

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Analytical Results

8260B, µg/kg (Soil)		TP7-3	TP8-7	MS	MSD	RPD
Date extracted	Reporting	05/14/09	05/14/09	05/15/09	05/15/09	
Date analyzed	Limits	05/18/09	05/18/09	05/15/09	05/15/09	
Dichlorodifluoromethane	50	nd	nd			
Chloromethane	50	nd	nd			
Vinyl chloride	50	nd	nd			
Bromomethane	50	nd	nd			
Chloroethane	50	nd	nd			
Trichlorofluoromethane	50	nd	nd			
Acetone	250	nd	**1,600**			
1,1-Dichloroethene	50	nd	nd	116%	128%	10%
Methylene chloride	20	nd	nd			
Methyl-t-butyl ether (MTBE)	50	nd	nd			
trans-1,2-Dichloroethene	50	nd	nd			
1,1-Dichloroethane	50	nd	nd			
2-Butanone (MEK)	250	nd	nd			
cis-1,2-Dichloroethene	50	nd	nd			
2,2-Dichloropropane	50	nd	nd			
Chloroform	50	nd	nd			
Bromochloromethane	50	nd	nd			
1,1,1-Trichloroethane	50	nd	nd			
1,2-Dichloroethane (EDC)	50	nd	nd			
1,1-Dichloropropene	50	nd	nd			
Carbon tetrachloride	50	nd	nd			
Benzene	20	nd	nd	93%	94%	1%
Trichloroethene (TCE)	20	nd	nd	95%	99%	4%
1,2-Dichloropropane	50	nd	nd			
Dibromomethane	50	nd	nd			
Bromodichloromethane	50	nd	nd			
4-Methyl-2-pentanone (MIBK)	250	nd	nd			
cis-1,3-Dichloropropene	50	nd	nd			
Toluene	50	nd	nd	115%	113%	2%
trans-1,3-Dichloropropene	50	nd	nd			
1,1,2-Trichloroethane	50	nd	nd			
2-Hexanone	250	nd	nd			
1,3-Dichloropropane	50	nd	nd			
Dibromochloromethane	50	nd	nd			
Tetrachloroethene (PCE)	20	nd	nd			
1,2-Dibromoethane (EDB)	50	nd	nd			
Chlorobenzene	50	nd	nd	110%	106%	4%
1,1,1,2-Tetrachloroethane	50	nd	nd			
Ethylbenzene	50	nd	nd			
Xylenes	150	nd	nd			
Styrene	50	nd	nd			
Bromoform	50	nd	nd			
1,1,2,2-Tetrachloroethane	50	nd	nd			
Isopropylbenzene	50	nd	nd			
1,2,3-Trichloropropane	50	nd	nd			
Bromobenzene	50	nd	nd			

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Analytical Results

8260B, µg/kg (Soil)		TP7-3	TP8-7	MS	MSD	RPD
Date extracted	Reporting	05/14/09	05/14/09	05/15/09	05/15/09	
Date analyzed	Limits	05/18/09	05/18/09	05/15/09	05/15/09	
n-Propylbenzene	50	nd	nd			
2-Chlorotoluene	50	nd	nd			
4-Chlorotoluene	50	nd	nd			
1,3,5-Trimethylbenzene	50	nd	nd			
tert-Butylbenzene	50	nd	nd			
1,2,4-Trimethylbenzene	50	nd	nd			
sec-Butylbenzene	50	nd	nd			
1,3-Dichlorobenzene	50	nd	nd			
1,4-Dichlorobenzene	50	nd	nd			
Isopropyltoluene	50	120	nd			
1,2-Dichlorobenzene	50	nd	nd			
n-Butylbenzene	50	nd	nd			
1,2-Dibromo-3-Chloropropane	50	nd	nd			
1,2,4-Trichlorobenzene	50	nd	nd			
Naphthalene	50	nd	nd			
Hexachloro-1,3-butadiene	50	nd	nd			
1,2,3-Trichlorobenzene	50	nd	nd			
Surrogate recoveries						
Dibromofluoromethane		96%	101%	93%	92%	
Toluene-d8		122%	121%	119%	118%	
4-Bromofluorobenzene		124%	120%	102%	104%	

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN NORTHWEST CHEMISTRY LABORATORY

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Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)
Method Blank	5/14/2009	100	nd	nd
AEG-MW1-S1-3	5/14/2009	107	nd	nd
AEG-MW1-S3-15	5/14/2009	93	nd	nd
AEG-MW2-S4-3	5/14/2009	87	**500**	nd
AEG-MW3-S6-3	5/14/2009	141	**200**	**13000**
AEG-MW3-S7-8	5/14/2009	96	nd	**200**
TPI-5	5/14/2009	73	nd	nd
TP5-6	5/18/2009	117	nd	nd
TP6-3	5/18/2009	84	nd	**520**
TP6-8	5/18/2009	84	nd	**130**
TP8-3	5/14/2009	98	nd	nd
TP8-7	5/14/2009	96	nd	**350**
TP8-7 DUP	5/18/2009	68	nd	**460**
Method Detection Limits			50	100

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

AEG
FLEGEL PROPERTY PROJECT
Client Project #07-200
Milton, Washington

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

Total Metals in Soil by EPA-6020 Method

Sample Number	Date Analyzed	Lead (Pb) (mg/kg)	Cadmium (Cd) (mg/kg)	Chromium (Cr) (mg/kg)	Arsenic (As) (mg/kg)	Mercury (Hg) (mg/kg)
Method Blank	5/14/2009	nd	nd	nd	nd	nd
AEG-MW3-S6-3	5/14/2009	290	nd	140	21	nd
TP2-5	5/14/2009	72	nd	28	8.4	nd
TP4-8	5/14/2009	13	nd	15	5.7	nd
TP6-3	5/14/2009	42	nd	18	6.5	nd
TP8-3	5/14/2009	67	nd	21	19	nd
TP2-5 Duplicate	5/14/2009	100	nd	29	7.7	nd
Method Detection Limits		5.0	1.0	5.0	5.0	0.5

"nd" Indicates not detected at listed detection limits.

ESN NORTHWEST | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: AEG

ADDRESS: 1728 State Ave NE Olympia

PHONE: 360.352.9835 FAX: 360.352.9164

CLIENT PROJECT #: 01-200 PROJECT MANAGER: Y. VAN

DATE: 5/13/09 PAGE 1 OF 2

PROJECT NAME: Flegel Property

LOCATION: Milton, WA

COLLECTOR: KROSLUND DATE OF COLLECTION 5/13

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	TPH - HCID	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (d & o)	PAH 8100	PAH 8270	PCBs 8082	Pesticides 8081	EPH	VPH	Methamphetamine	Pb	Hex Chrome	RCRA 5 METALS	TC 4	NOTES	Total Number of Containers	Laboratory Note Number
1 AEG-MW1-S1-3	3'	0913	Soil	2 JAR 2 VOA						X																
2 AEG-MW1-S2-8	8'	0913	Soil	"	X				X																	
3 AEG-MW1-S3-15	15'	0913	Soil	"						X																
4 AEG-MW2-S4-3	3'	0953	Soil	"						X																
5 AEG-MW2-S5-10	10'	0953	Soil	"	X	X			X	X																
6 AEG-MW3-S6-3	3'	1059	Soil	"	X				X	X											X					
7 AEG-MW3-S7-8	8'	1059	Soil	"		X	X			X																
8 AEG-MW3-S8-12	12'	1059	Soil	"	X				X																	
9. TP1-5	5'	0941	Soil	"						X																
10. TP1-8	8'	0941	Soil	"	X				X																	
11. TP2-5	5'	1034	Soil	"																	X					
12. TP3-8	8'	1101	Soil	"		X																				
13. TP4-6	8'	1136	Soil	"	X				X												X					
14. TP5-6	6'	1151	Soil	"		X	X			X																
15. TP6-3	3'	1245	Soil	"						X											X					
16. TP6-8	8'	1245	Soil	"						X																
17. TP7-3	3'	1317	Soil	"		X																				
18. TP7-6	6'	1317	Soil	"	X				X																	

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Heather Krosland	05/14/09 7:30am	A. Lawrence 5/14/09 9:30	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: (24 HR) 48 HR (5 DAY)

NORTHWEST Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: AEG

ADDRESS: 1728 State Ave NE Olympia

PHONE: 360.352.9835 FAX: 360.352.9164

CLIENT PROJECT #: 07-200 PROJECT MANAGER: Y. VAN

DATE: 5/13/09 PAGE 2 OF 2

PROJECT NAME: Fleet Property

LOCATION: Milton, WA

COLLECTOR: K Roslund DATE OF COLLECTION 5/13

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	TPH - HCID	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (d & o)	PAH 8100	PAH 8270	PCBs 8082	Pesticides 8081	EPH	VPH	Methamphetamine	Pb	Hex Chrome	RCRA 5 METALS	NOTES	Total Number of Containers	Laboratory Note Number
1. TP8-3	3'	1336	SOIL	2 JAR 2 VOA	X				X	X															
2. TP8-7	7'	1336	SOIL	"	X	X	X		X	X											X				
3. TP9-6	6'	1358	SOIL	"	X				X																
4.																									
5.																									
6.																									
7.																									
8.																									
9.																									
10.																									
11.																									
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17.																									
18.																									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	5/14/09 1:52pm	[signature]	5/14/09 9:30
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR (5 DAY)

Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

June 10, 2009

Yen Vy Van
Associated Environmental Group, Inc.
1728 State Avenue NE
Suite 101
Olympia, WA 98506

Dear Ms. Van:

Please find enclosed the analytical data report for the Flegel Property Project located in Milton, Washington. Water samples were received and analyzed for VOC's by EPA Method 8260B, BTEX by EPA Method 8021B, Gasoline by NWTPH-Gx, Diesel & Oil by NWTPH-Dx/Dx Extended, and Metals by EPA Method 7000 Series on May 29 & 31, 2009 and June 1, 2009.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
President
Libby Environmental, Inc.

Phone (360) 352-2110 * Fax (360) 352-4154 * libbyenv@aol.com

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER

Sample Description		Method Blank	AEG MW2-W	AEG MW1-W	ADAPT MW2-W	AEG MW3-W
Date Sampled	Reporting	N/A	5/28/09	5/28/09	5/28/09	5/28/09
Date Analyzed	Limits	5/29/09	5/29/09	5/29/09	5/29/09	5/29/09
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	2.0	nd	nd	nd	nd	nd
Chloromethane	2.0	nd	nd	nd	nd	nd
Vinyl chloride *	0.2	nd	nd	nd	nd	nd
Bromomethane	2.0	nd	nd	nd	nd	nd
Chloroethane	2.0	nd	nd	nd	nd	nd
Trichlorofluoromethane	2.0	nd	nd	nd	nd	nd
1,1-Dichloroethene	2.0	nd	nd	nd	nd	nd
Methylene chloride	1.0	nd	nd	nd	nd	nd
Methyl *tert*-Butyl Ether (MTBE)	5.0	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd	nd	nd	nd	nd
1,1-Dichloroethane	1.0	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.0	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd	nd	nd	nd	nd
Chloroform	1.0	nd	nd	nd	nd	nd
1,1,1-Trichloroethane (TCA)	1.0	nd	nd	nd	nd	nd
Carbon tetrachloride	1.0	nd	nd	nd	nd	nd
1,1-Dichloropropene	1.0	nd	nd	nd	nd	nd
Benzene	1.0	nd	nd	nd	nd	1.5
1,2-Dichloroethane (EDC)	1.0	nd	nd	nd	nd	nd
Trichloroethene (TCE)	1.0	nd	nd	nd	nd	nd
1,2-Dichloropropane	1.0	nd	nd	nd	nd	nd
Dibromomethane	1.0	nd	nd	nd	nd	nd
Bromodichloromethane	1.0	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd	nd	nd	nd	nd
Toluene	1.0	nd	nd	14.3	nd	11.1
Trans-1,3-Dichloropropene	1.0	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd	nd	nd	nd	nd
Tetrachloroethene (PCE)	1.0	nd	nd	nd	nd	nd
1,3-Dichloropropane	1.0	nd	nd	nd	nd	nd
Dibromochloromethane	1.0	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB) *	0.01	nd	nd	nd	nd	nd
Chlorobenzene	1.0	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd	nd	nd	nd	nd
Ethylbenzene	1.0	nd	nd	nd	nd	6.5
Total Xylenes	2.0	nd	nd	nd	nd	54.5
Styrenes	1.0	nd	nd	nd	nd	nd

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER

Sample Description		Method Blank	AEG MW2-W	AEG MW1-W	ADAPT MW2-W	AEG MW3-W
Date Extracted	Reporting	N/A	5/28/09	5/28/09	5/28/09	5/28/09
Date Analyzed	Limits	5/29/09	5/29/09	5/29/09	5/29/09	5/29/09
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Bromoform	1.0	nd	nd	nd	nd	nd
Isopropylbenzene	4.0	nd	nd	nd	nd	8.1
1,2,3-Trichloropropane	1.0	nd	nd	nd	nd	nd
Bromobenzene	1.0	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd	nd	nd	nd	nd
n-Propylbenzene	1.0	nd	nd	nd	nd	13.9
2-Chlorotoluene	1.0	nd	nd	nd	nd	nd
4-Chlorotoluene	1.0	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd	nd	nd	nd	37.4
tert-Butylbenzene	1.0	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd	nd	nd	nd	119
sec-Butylbenzene	1.0	nd	nd	nd	nd	6.1
1,3-Dichlorobenzene	1.0	nd	nd	nd	nd	nd
Isopropyltoluene	1.0	nd	nd	nd	nd	10.8
1,4-Dichlorobenzene	1.0	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd	nd	nd	nd	nd
n-Butylbenzene	1.0	nd	nd	nd	nd	6.3
1,2-Dibromo-3-Chloropropane	1.0	nd	nd	nd	nd	nd
1,2,4-Trichlorolbenzene	2.0	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	5.0	nd	nd	nd	nd	nd
Naphthalenes	5.0	nd	nd	7.7	nd	89.2
1,2,3-Trichlorobenzene	5.0	nd	nd	nd	nd	nd
Surrogate Recovery						
Dibromofluoromethane		106	120	92.6	91.7	108
1,2-Dichloroethane-d4		120	108	107	112	115
Toluene-d8		89.5	108	101	94.4	95.6
4-Bromofluorobenzene		97.3	126	102	101	110

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

* INSTRUMENT DETECTION LIMIT
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

QA/QC Data - EPA 8260B Analyses

	Sample Identification: Matrix Spike			Matrix Spike Duplicate			RPD
	Spiked Conc. (ug/l)	Measured Conc. (ug/l)	Spike Recovery (%)	Spiked Conc. (ug/l)	Measured Conc. (ug/l)	Spike Recovery (%)	
1,1-Dichloroethene	10	9.5	95	10	10.7	107	11.9
Benzene	10	9.8	98	10	9.2	92	6.3
Toluene	10	9.6	96	10	9.2	92	4.3
Chlorobenzene	10	10.2	102	10	10.6	106	3.8
Trichloroethene (TCE)	10	9.9	99	10	10.6	106	6.8
Surrogate Recovery							
Dibromofluoromethane			96.7			103	
1,2-Dichloroethane-d4			112			98.4	
Toluene-d8			99.4			94.7	
4-Bromofluorobenzene			95.1			95.4	

	Laboratory Control Sample		
	Spiked Conc. (ug/l)	Measured Conc. (ug/l)	Spike Recovery (%)
1,1-Dichloroethene	10	10.0	100
Benzene	10	9.3	93
Toluene	10	10.2	102
Chlorobenzene	10	10.4	104
Trichloroethene (TCE)	10	10.4	104
Surrogate Recovery			
Dibromofluoromethane			102
1,2-Dichloroethane-d4			106
Toluene-d8			92.4
4-Bromofluorobenzene			95.6

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

Analyses of Gasoline (NWTPH-Gx) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Gasoline (ug/l)
Method Blank	5/29/09	89.5	nd
AEG MW2-W	5/29/09	107	nd
AEG MW1-W	5/29/09	101	nd
ADAPT MW2-W	5/29/09	94.1	nd
AEG MW3-W	5/31/09	95.6	nd
Practical Quantitation Limi			100

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Toluene-d8): 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcut

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (ug/l)	Mineral Oil (ug/l)	Oil (ug/l)
Method Blank	6/1/09	109	nd	nd	nd
AEG MW2-W	6/1/09	116	nd	nd	nd
AEG MW1-W	6/1/09	100	nd	nd	nd
ADAPT MW2-W	6/1/09	85	nd	nd	nd
AEG MW3-W	6/1/09	100	430	nd	nd
AEG MW3-W Dup	6/1/09	93	700	nd	nd
Practical Quantitation Limit			200	400	400

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

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Athanasius Shaw

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

Analyses of Mercury in Water by EPA Method 7471

Sample Number	Date Analyzed	Mercury (ug/l)
Method Blank	6/1/09	nd
AEG MW2-W	6/1/09	nd
AEG MW1-W	6/1/09	nd
ADAPT MW2-W	6/1/09	nd
ADAPT MW2-W Dup	6/1/09	nd
AEG MW3-W	6/1/09	nd
Practical Quantitation Limit		0.5

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

QA/QC for Mercury by EPA Method 7471

Sample Number	Date Analyzed	Mercury Percent Recovery
LCS	6/1/09	104%
ADAPT MW2-W MS	6/1/09	87%
ADAPT MW2-W MSD	6/1/09	82%
RPD	6/1/09	6.4
Practical Quantitation Limit		0.5

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

Analyses of Metals in Water by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (ug/l)	Cadmium (ug/l)	Chromium (ug/l)	Arsenic (ug/l)
Method Blank	6/1/09	nd	nd	nd	nd
AEG MW2-W	6/1/09	40.7	nd	27.7	102
AEG MW1-W	6/1/09	6.6	nd	nd	50.9
ADAPT MW2-W	6/1/09	nd	nd	nd	nd
AEG MW3-W	6/1/09	nd	nd	7.8	20.4
Practical Quantitation Limit		5.0	1.0	10.0	5.0

"nd" Indicates not detected at the listed detection limits.

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

FLEGEL PROPERTY PROJECT
Milton, Washington
AEG
Client Project #07-200
Libby Env.Project No.L090529-1

QA/QC for Metals in Water by EPA Method 7000 Series

Sample Number	Date Analyzed	Lead (% Recovery)	Cadmium (% Recovery)	Chromium (% Recovery)	Arsenic (% Recovery)
LCS	6/1/09	104%	118%	94%	99%
MS	6/1/09	92%	121%	90%	107%
MSD	6/1/09	106%	114%	97%	109%
RPD	6/1/09	14	6.0	6.9	1.9
Practical Quantitation Limit		5.0	1.0	10.0	5.0

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Sherry Chilcutt

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Chain of Custody Record

Client: AEG
Address: 1778 State Ave NE Olympia WA
Phone: 360.352.9435 Fax: 360.352.8164
Client Project # 09-200

Date: 5/28/09
Page: 1 of 1
Project Manager: Y. Vaa
Project Name: Flegel Property
Location: Milton WA
Collector: KROSCUP
Date of Collection: 5/28/09

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals			Field Note/# Containers
1 AEL MW2-W	14	1410	H2O		X	X			X	X				X				VOA AMBER POLY
2 AEG MW1-W	"	1454	"		X	X			X	X				X				"
3 ADAPT MW7-W	"	1538	"		X	X			X	X				X				"
4 AEL MW3-W	"	1615	"		X	X			X	X				X				"
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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16																		
17																		
18																		

	Date / Time		Date / Time
Relinquished by:	5/29/09 0915	Received by	5/29/09 9:15A
Relinquished by:	Date / Time	Received by	Date / Time
Relinquished by:	Date / Time	Received by	Date / Time

Sample Receipt:

Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:

STD

TAT 24HR 48HR 5-Day

Distribution White - Lab, Yellow - File, Pink - Originator