

## Remedial Action Report

*Conducted on:*

**H & H Property**

407 Porter Way

Milton, Washington 98354-9686

Ecology Facility/Site ID: 89863773

Ecology Cleanup Site ID: 4629

*Prepared for:*

**Mr. Robert R. Graham**

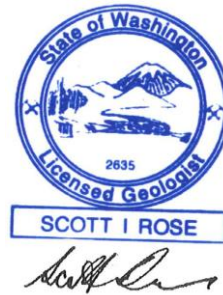
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AEG Project #: 15-112

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## **1.0 INTRODUCTION**

Associated Environmental Group, LLC (AEG) has completed a remedial action and confirmational sampling at the H&H Property, located at 407 Porter Way in Milton, Washington (Site). On August 26, 2015, AEG supervised an excavation on the east side of the current H&H Diesel building. The intent was to remove contaminated soil around the location of previous soil boring B-1. Soil analytical results obtained from boring B-1 samples were above Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup levels.

During excavation east of the building, AEG encountered a concrete, septic-like vault and a north-south trending stormwater trench containing oily contamination. AEG was directed to take out contaminated material as needed to remove the source material. After the extent of contamination had been defined in Site soil and excavation of contaminated material was complete, a permeable membrane filter (PMF) was installed under the east side of the building and to the north in the stormwater trench. The structure consists of clean, high-transmissivity soil mixed with mulch/wood chips at 40% by volume, wrapped in a Mirafi Geotextile. The PMF is intended to provide significantly increased and bioavailable organic surface area for any remaining contaminants that may migrate from underneath the building structures and stormwater trench to adhere, helping to keep the imported fill clean.

AEG also installed three monitoring wells around the excavation area (MW-4, MW-5, and MW-6) to monitor post-excavation groundwater conditions.

### **1.1 Site Description**

The Site includes portions of Pierce County parcel numbers 0420057009 (4.96 acres) and 0420057010 (3.41 acres), located approximately 500 feet to the south of the intersection between Porter Way and 4<sup>th</sup> Avenue in Milton, Washington. The Site is currently occupied by a service garage (H&H Diesel) and storage building. According to Pierce County records, the 8,640-square-foot service garage was originally built in 1969, and the 720-square-foot storage building was built in 2001. Two aboveground storage tanks (ASTs), one for propane and the other for lube oil, are located on the east side of the service garage. The Site is bounded by commercial properties to the north, residential properties to the east, a wetland to the south, and Interstate 5 to the west. Figure 1, *Vicinity Map*, presents the general vicinity of the Site. The Site's current layout can be seen in Figure 2, *Site Map*.

### **1.2 Site and Regional Geology and Hydrogeology**

The Site is underlain by Quaternary age floodplain peat deposits. Hylebos Creek is located approximately 600 feet to the west of the Site, and the Puyallup River is located approximately 2.5 miles south. Peat deposits at the Site are generally overlain by the Semiahmoo muck soil unit,



according to the United States Department of Agriculture's Soil Survey. This native material is a fine-grained, floodplain deposit that is derived from herbaceous organic material (peat) and is commonly found in the valley drainages from Tacoma to Renton. This material is very poorly drained and the groundwater tends to be 0 to 12 inches below ground surface (bgs).

The subsurface conditions found at the Site during this investigation generally consisted of imported fill to a depth of approximately 5 to 7 feet bgs, which tapered out as the excavation extended north and south. Cut wood debris, bark, and dimensional lumber was observed from 7 to 10 feet bgs. At approximately 10 feet bgs, the subsurface transitioned to organic silt to the total depth explored of 15 feet bgs. Groundwater was encountered at the Site ranging from 6 to 11 feet bgs, and the direction of groundwater flow is to the south.

## **2.0 PREVIOUS ENVIRONMENTAL WORK SUMMARY**

This Site has a history of environmental issues. The Tacoma-Pierce County Health Department and Ecology have issued citations and warnings to the Site beginning in 1974. Petroleum-based solvents, waste oil, fuel, and “*caustic washing rinsate*” have all been reported to be present at the Site. In 1991, a 500-gallon Stoddard Solvent underground storage tank (UST) was reportedly removed from the Site. Contaminated soil associated with this UST was confirmed. The exact location of this UST is unknown; however, it is presumed it was located on the east side of the service garage where other tanks have been located.

In 1992, Ecology discovered a leaking AST located on the east side of the main building. The AST contained waste oil and consisted of a steel tank surrounded by a cracked concrete vault. Ecology also noted that rinsate from caustic parts washing at the Site was allowed to run onto the ground and infiltrate the subsurface.

### **2.1 *Phase II Environmental Site Assessment (1996)***

In July 1996, Columbia Environmental (Columbia) 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 building. Analytical results of soil samples collected from these borings indicated concentrations of diesel- and heavy oil-range petroleum hydrocarbons (TPH) in excess of the MTCA Method A soil cleanups levels in effect at that time. Groundwater samples collected from these three borings also indicated concentrations of diesel-range TPH at concentrations above the MTCA Method A cleanup levels in effect at that time (Columbia, 1996). The conclusion of this Phase II ESA was that further investigation was warranted.

### **2.2 *Limited Soil and Water Sampling and Testing (1999)***

In March 1999, Saltbush Environmental, 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 to the east of the building, to a depth of approximately 4 feet bgs. Both soil and groundwater samples were collected from these borings and analyzed for diesel- and oil-range TPH. Diesel- and oil-range TPH in groundwater was found at both locations to be above their respective MTCA Method A cleanup levels (Saltbush, 4/1999).

### **2.3 *Remedial Investigation (1999)***

In July 1999, Saltbush advanced 14 borings (B1 through B14) at the Site. Of the 30 soil samples reportedly collected, three were submitted for laboratory analysis. Analytical results indicated no detectable concentrations of diesel- or oil-range TPH in the soil samples. These borings were reportedly advanced to depths of 6 to 8 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 four monitoring wells (MW-1 through MW-4) at the Site. These wells were completed to a depth of approximately 9.5 feet bgs. No soil samples were collected from these wells during drilling activities. Groundwater samples were collected from these wells and did not reveal the presence of TPH (Saltbush, 10/1999).

#### **2.4 Limited Assessment of Soil and Groundwater (2001)**

In June 2001, LSI-ADAPT performed a “Limited Assessment” of soil and groundwater at the Site. Five test pits were dug at the Site with TP-5 being located closest to the building. Soil and groundwater samples were collected from these test pits and analyzed for TPH and metals. Laboratory results of samples collected from TP-5 indicated the presence of heavy oil-range TPH. In addition, the results indicated low detections of lead and chromium (LSI-ADAPT, 2001).

#### **2.5 Site Characterization (2009)**

AEG conducted a Site Characterization in June 2009 to evaluate the potential for migration of dissolved-phase diesel- and gasoline-range TPH from the H&H facility, and to characterize the fill present at the Site for the presence of gasoline- and diesel-range TPH, volatile organic compounds (VOCs), and metals. AEG advanced three soil borings, which were completed as groundwater monitoring wells (AEG MW-1, AEG MW-2, and AEG MW-3) and nine test pits (TP-1 through TP-9). One historical groundwater monitoring well (ADAPT MW-2) was also located and sampled.

Analytical results from soil and groundwater obtained during this investigation revealed the presence of diesel-range TPH and priority pollutant metals, including lead, arsenic, and chromium, at concentrations above their respective MTCA Method A cleanup levels for these constituents.

#### **2.6 Groundwater Monitoring and Sampling (2009-2010)**

AEG completed four groundwater monitoring and sampling events from May 2009 to April 2010. In these sampling events, monitoring wells AEG MW-1, AEG MW-2, AEG MW-3, and ADAPT MW-2 were sampled for the following constituents of concern:

- Gasoline-range TPH;
- Diesel, heavy oil and mineral oil-range TPH;
- VOCs;
- Total mercury, lead, cadmium, chromium, and arsenic; and
- Dissolved arsenic and lead.

Depth to water was obtained in each monitoring well during the sampling events. In September 2009, approximately 0.68 feet of free product was found in monitoring well AEG MW-3.

From the May 2009 to April 2010 groundwater sampling events, the following constituents were present:

- Gasoline-range TPH was detected below the MTCA Method A cleanup level in monitoring wells AEG MW-1, AEG MW-3, and ADAPT MW-2;
- Diesel-range TPH and heavy-oil range TPH were detected in monitoring well AEG MW-3, above the MTCA Method A cleanup level;
- Total and dissolved arsenic were detected in all monitoring wells, above MTCA Method A cleanup levels; and
- Total lead and chromium were detected in monitoring wells AEG MW-1 and AEG MW-2 during the May 2009 sampling event.

The analytical results are presented in Table 4, *Summary of Quarterly Groundwater Analytical Result –TPH & Metals*, and Table 5, *Summary of Quarterly Groundwater Analytical Results – Selected VOC*.

Contamination found in the groundwater was attributable to runoff from a concrete wash pad used to power wash engine blocks and other parts on the east side of the building. This was thought to be the only source at the time and was removed to eliminate further contaminant runoff into the subsurface.

## **2.7 Remedial Investigation (2015)**

On March 24, 2015, AEG supervised the advancement of 10 soil borings (B-1 through B-10) at the Site. The borings were advanced to maximum depths of between 8 and 12 feet bgs via a Geoprobe® drilling rig operated by Environmental Services Network NW, Inc. (ESN) of Olympia, Washington.

The borings were located near the former waste oil AST and the current Site structure to delineate the extent of contamination. Soil samples were collected during drilling for field screening and laboratory analyses.

Based on field observations, a total of 12 soil samples from eight borings were transferred to laboratory-provided pre-weighed 40-milliliter (ml) glass vials and 4-ounce jars. The soil samples were transported to the ESN laboratory, a Washington State certified analytical laboratory in Olympia, Washington, for analyses following industry standard chain-of-custody procedures.

In each boring, a temporary well screen was installed to collect a groundwater sample immediately after reaching the total boring depth. AEG sampled groundwater from all 10 borings and two

monitoring wells (AEG MW-1 and AEG MW-2) on Site. Monitoring wells AEG MW-3 and ADAPT MW-2 could not be located for sampling.

Groundwater analytical results obtained from soil boring B-1 were above MTCA Method A cleanup levels for gasoline-range TPH, diesel-range TPH, heavy oil-range TPH, and total lead. Groundwater analytical results obtained from soil borings B-7 and B-10 were also above MTCA Method A cleanup levels for heavy oil-range TPH and total lead. The groundwater sample from soil boring B-7 also detected dissolved lead above MTCA Method A cleanup levels.

Analytical results obtained from soil samples for this investigation showed that soil for B-1 was above MTCA Method A cleanup levels for gasoline-range TPH and diesel-range TPH. Oil-range TPH and lead was detected above MTCA Method A cleanup levels in soil borings B-1, B-7, and B-10. Most groundwater samples from soil borings also contained total and dissolved arsenic above MTCA Method A cleanup levels.

The analytical results are presented in Table 3, *Summary of (Soil Borings) Soil Analytical Result*, Table 4, *Summary of Quarterly Groundwater Analytical Results – TPH & Metals*, and Table 5, *Summary of Quarterly Groundwater Analytical Results – Selected VOC*.

### **3.0 OBJECTIVES AND SCOPE OF WORK**

The objective of this remedial action at the Site was to remediate TPH contamination by excavating contaminated soil and installing an engineered bioremediation control to help address any remaining residual contamination. The purpose of installing monitoring wells MW-4, MW-5, and MW-6 was to further assess subsurface environmental conditions post excavation.

Specific tasks performed included:

- Conducting both public and private utilities locates for the Site and vicinity. Public rights of way locates were performed by the Underground Utilities Locate Center; Applied Professional Services, Inc. (APS) provided private utility locates on the Site;
- Excavating near AEG's soil boring B-1 to remove petroleum-contaminated soils (PCS), including metals previously identified in the fill portion;
- Installing a PMF consisting of soil mixed with mulch/wood chips at 40% by volume, wrapped in a Mirafi Geotextile fabric;
- Installing three groundwater monitoring wells (MW-4, MW-5, and MW-6) to a total depth of 13 feet bgs using a Geoprobe® direct-push drilling rig;
- Collecting groundwater samples from each of the three newly installed monitoring wells;
- Logging the subsurface media during the investigation to observe and document soil lithology, color, moisture content, and evidence of impairment;
- Collecting soil samples for laboratory analyses at various depths based on field observations;
- Transporting and submitting the selected soil samples and groundwater samples to ESN, a Washington State certified analytical laboratory, for analyses;
- Completing data analysis of laboratory analytical results and comparing data to the MTCA Method A cleanup levels for soil and groundwater;
- Disposing of investigation-derived wastes and PCS at the LRI landfill in Graham, Washington; and
- Preparing this report presenting final documentation of the field activities and methodologies, and summarizing the analytical results, conclusions, and recommendations.

## **4.0 REMEDIAL ACTION SUMMARY AND FIELD METHODOLOGY**

### **4.1 Remedial Action and Well Installation**

Beginning on August 26, 2015, AEG and Kelley Excavating & Site Development, LLC (Kelley) excavated soil and fill materials east of the H&H Diesel building using a John Deere 270 tractor with a 3-foot wide toothed bucket. Initially, test pit TP-1 was excavated in the vicinity of soil boring B-1; however, additional contamination was identified as the excavation got closer to the building and identified an impacted stormwater trench. The final limits of the excavation were approximately 70 feet by 80 feet by 9 feet deep. AEG observed a sandy gravel with silt fill material to approximately 4 feet bgs. From 4 to 6 feet bgs were cut timbers and what appeared to be a wood product similar to the coarse bark used in landscaping. From 6 to 9 feet bgs, peat was observed and this was the maximum depth of exploration. Excavation directions were based on Photoionization Detector (PID) readings that increased as the excavation moved westerly and decreased easterly. Confirmation soil samples were collected from the base and sidewalls of the final excavation limits.

Three inches of asphalt were removed to access the subsurface in the western part of the excavation. The excavation was limited to the west by the building, and to the north by fiber optic/communication and power utilities. As the excavation approached the building, a stormwater trench was encountered with a strong petroleum odor and visible staining. Sample HS-1 3', collected from beneath the stormwater drain, detected concentrations of benzene, ethylbenzene, xylenes, naphthalene, gasoline-range TPH, and heavy oil-range TPH above their respective MTCA Method A cleanup levels. In the southwest corner of the excavation, water was observed coming from the excavation sidewall parallel to a lean-to canopy covering a parts washer. A concrete, septic-like, vault was also identified under the lean-to, which at the time of investigation contained free oil product on the surface.

Twelve 30-pound bags of Regeneration Oxygen Reduction Compound-Advanced® (ORC-A®) was mixed in the exposed groundwater and sloughed soils at the base of the excavation. A total of 991 pounds of ORC-A® pellets, 390 pounds of RegenOx Part A, and 120 pounds of RegenOx Part B were mixed in three sections from south to north prior to installing the PMF. AEG placed the PMF to the east of the stormwater pipe to create a barrier where hydrocarbons can adhere to the geotextile fabric and the mulch mix introduced into the silt free fill. The purpose of the PMF is to limit the remaining contamination under the lean-to structure from migrating to the newly placed, uncontaminated fill.

The PMF was created using TenCate Mirafi X-Series Woven Polypropylene Geotextile fabric. Sheets 12 feet by 25 feet were cut and laid out in an east-west orientation with approximately 3 feet of overlap progressing to the north. These sheets were laid in the base of the excavation at approximately 7 to 8 feet bgs and pulled taught. Clean fill was placed on top of the fabric to about



2 feet bgs. A total of 40% mulch by volume was mixed in with the imported sand with trace silt fill. When the combination fill reached 2 feet bgs, the ends of each sheet were folded over the mulch-fill. The final dimensions of the PMF were approximately 55 feet north-south, 15 feet east-west, and 7 to 8 feet in vertical profile. Three sheets were placed directly on top of the PMF north to south with approximately 3 feet of overlap to provide a bridging effect due to the potential of settling material that was used in the PMF.

On October 2, 2015, AEG supervised the advancement of monitoring wells MW-4, MW-5, and MW-6 at the Site. The monitoring wells were advanced via a Geoprobe drilling rig operated by ESN to a total depth of 13 feet bgs. Soil samples were collected during drilling for field screening and laboratory analyses. The monitoring wells were advanced, north, south, and east of the PMF and excavation area. On October 8, 2015, AEG obtained depth to water measurements and groundwater samples from monitoring wells MW-4, MW-5, and MW-6.

The locations of Site features, excavation extents, and monitoring wells can be seen in Figure 2, *Site Map*. Photographs from the investigation are presented in Appendix A, *Site Photographs*.

#### **4.2 Well Construction**

Monitoring wells MW-4, MW-5, and MW-6 were constructed pursuant to the Ecology *Minimum Standards for Construction and Maintenance of Wells*, Chapter 173-160 WAC, and constructed similarly to the Site's existing monitoring wells. The wells were each constructed to a depth of 13 feet bgs with 10 feet of 2-inch diameter 0.020-inch slot polyvinyl chloride (PVC) screen. The annular space around the well screen was filled with 10/20 Colorado sand to approximately 1.5 feet above the top of the well screen. Bentonite chips were used above the sand to within 1 foot of the ground surface to seal the well. A traffic-rated surface monument was then placed over the well casing to protect it. Ecology tag numbers associated with the monitoring wells are as follows:

- MW-4 – BIM187;
- MW-5 – BIM188; and
- MW-6 – BIM189.

#### **4.3 Quality Controls**

To ensure that quality information was obtained at the Site:

- All soil samples were collected in accordance with industry protocols for the collection, documentation, and handling of samples;
- Descriptions of soil sampling depths were carefully logged in the field; the excavator and Site geologist confirmed sample depths as soil samples were collected;
- Nitrile gloves were used in handling all sampling containers and sampling devices;



- Soil samples were tightly packed into jars to eliminate sample headspace;
- Upon sampling, all samples were placed immediately into chilled ice chests; and
- The samples were transported under a chain-of-custody to the ESN analytical laboratory in Olympia, Washington, for analysis.

The laboratory provided standard quality assurance/quality control (QA/QC), which included:

- Surrogate recoveries for each sample;
- Method blank results;
- Duplicate analyses, matrix or blank spiked analyses; and
- Duplicate spiked analyses.

#### **4.4 Soil Sampling Procedures**

Soil sampling methods for this work followed the protocols established by Ecology and the U.S. Environmental Protection Agency (EPA). To minimize VOC losses, soil sampling and field preservation methods for VOCs followed methods set forth by EPA's Method 5035A and Ecology's guidance, "*Collecting and Preparing Soil Samples for VOC Analysis*". Soil samples were collected from the center of the excavator bucket. Soils were observed to document soil lithology, color, moisture content, and sensory evidence of contamination.

Based on field observations, a total of 14 soil samples were transferred to laboratory-provided, pre-weighed, 40-ml VOA glass vials and 4-ounce glass jars. Soil samples were transported to ESN in Olympia, Washington, for analyses following industry standard chain-of-custody procedures.

Laboratory analytical results are provided in Appendix B, *Supporting Documents, Boring Logs, Laboratory Datasheets*.

#### **4.5 Excavation-Derived Waste**

Excavation-derived waste for this project consisted of soil from the excavation and well installation activities. Soil cuttings from the monitoring well borings were combined with the excavated soil stockpile. A total of 815 tons of PCS were transported to LRI in Graham, Washington via truck and pup transport. Purge water from the well sampling was stored in pre-existing 55-gallon drums, pending off-Site disposal.

## 5.0 ANALYTICAL RESULTS

Selected soil samples from the excavation and soil borings were analyzed for one or more of the following:

- Gasoline-range TPH by Method NWTPH-Gx;
- Diesel-range TPH and lube oil-range TPH by Method NWTPH-Dx Extended with Silica Gel Cleanup;
- VOCs by EPA Method 8260/5035;
- Polynuclear aromatic hydrocarbon (PAHs) by Method 8270;
- Polychlorinated biphenyls (PCBs) by Method 8081;
- MTCA 5 Metals by EPA 6020; and
- Hexavalent Chromium by Method 7196A.

All analytical results were compared to MTCA Method A cleanup levels. Copies of the laboratory analytical results are provided in Appendix B, *Supporting Documents, Laboratory Datasheets*.

### 5.1 Soil Results

The analytical results for all soil samples, as compared to MTCA Method A soil cleanup levels, are presented in Table 1, *Summary of Excavation (Soil) Analytical Results (VOC, TPH)*, Table 2, *Summary of Excavation (Soil) Analytical Results (PAH, PCB, Metals)*, and Table 3, *Summary of (Soil Borings) Soil Analytical Results*.

Of the soil samples collected from the excavation, samples TP-1 1', TP-1 4', and HS-4 3' were performance samples, and were over-excavated. Also, HS-8SP, HS-9SP, and HS-10SP were collected from the stockpile and disposed off Site. Analytical results of the confirmation and soil boring soil samples exceeding MTCA Method A cleanup levels included the following:

- Gasoline-range TPH **above** the MTCA Method A cleanup level of 30 milligrams per kilogram (mg/kg) in HS-1 3' (40,000 mg/kg), HS-2 3' (110 mg/kg), HS-2 5' (92 mg/kg), HS-3 5' (130 mg/kg), B11-MW4-5 (280 mg/kg), B12-MW5-5 (38 mg/kg), and B13-MW6-5 (53 mg/kg);
- Oil-range TPH **above** the MTCA Method A cleanup level of 2,000 mg/kg in HS-1 3' (2,500 mg/kg);

- Benzene, Ethylbenzene, and Xylenes **above** their MTCA Method A cleanup levels of 0.03 mg/kg, 6 mg/kg, and 9 mg/kg, respectively, in HS-1 3' at 0.035 mg/kg, 12 mg/kg, and 57 mg/kg, respectively; and
- Naphthalene **above** the MTCA Method A cleanup level of 5 mg/kg in HS-1 3' at 5.4 mg/kg by Method 8260/5035 and 9.2 mg/kg by Method 8270.

## 5.2 **Groundwater Results**

The groundwater samples collected from monitoring wells MW-4, MW-5, and MW-6 were analyzed for the following:

- Gasoline-range TPH by Method NWTPH-Gx;
- Diesel-range TPH and lube oil-range TPH by Method NWTPH-Dx Extended;
- BTEX compounds by EPA Method 8260; and
- Naphthalenes by Method 8270.

Analytical results for the groundwater samples obtained from monitoring wells MW-4, MW-5, and MW-6 revealed no detections of constituents of concern above MTCA Method A cleanup levels.

Table 4, *Summary of Quarterly Groundwater Analytical Results – TPH & Metals*, and Table 5, *Summary of Quarterly Groundwater Analytical Results – Selected VOC*, present analytical results as compared to MTCA Method A groundwater cleanup levels.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

Based on the results of the samples analyzed and the findings from this excavation, AEG concludes that:

- The highest gasoline- and oil-range TPH **above** MTCA Method A cleanup levels was detected at soil sample HS-1 3' at approximately 3 feet bgs. Contamination appeared to be concentrated in the stormwater utility pipe trench that trended north-south at the Site. Excavation was limited to the north of HS-1 by additional buried power and communication utilities. Confirmation samples below MTCA Method A cleanup levels were obtained on the southern end of the trench.
- The total excavation dimensions east of the H&H Diesel building were approximately 70 feet by 80 feet by 9 feet deep.
- A total of about 815 tons of PCS was disposed of off Site at LRI landfill in Graham, Washington.
- Groundwater elevations appeared approximately 5 feet bgs at the time of the excavation. There is a likelihood that shallow surface groundwater could have been affected by the contamination that was removed.
- Monitoring well AEG MW-3 was removed during the excavation. Its well tag is #BCS 949.
- Contamination in soil was defined in the lateral and vertical directions, with the exception of under the H&H Diesel building and at the northern end of the stormwater pipe trench.
- MW-4, MW-5, and MW-6 have shown over three rounds of groundwater results that gasoline-, diesel-, and heavy oil-range TPH contamination were below MTCA Method A CULs.
- Arsenic was detected in groundwater above MTCA Method A cleanup levels in nearly all monitoring wells and temporary well points throughout the Site. However, no arsenic has been detected in soil above MTCA Method A cleanup levels, nor are there any known sources of arsenic at the Site. Documented sources of arsenic in the vicinity of the Site include the B&L Woodwaste Landfill (Ecology Facility/Site No. 1203), which is located about 0.3 miles to the south, and the US Gypsum Highway 99 site (Ecology Facility/Site No. 84531356), which is located about 0.3 miles southwest. Arsenic is present in soil and groundwater at these sites at concentrations greater than

10 times the concentrations detected at this Site. As such, it appears the elevated arsenic is from an off-Site source.

- Total chromium had previously been detected in Site soil above MTCA Method A levels for hexavalent chromium. Therefore, soil samples from this remedial action were speciated and analyzed for both total and hexavalent chromium. Hexavalent chromium was not detected in any of the soil samples, and chromium was not detected in groundwater above MTCA Method A cleanup levels.
- The concrete, septic-like vault under the lean-to and adjacent to the H&H Diesel building was vacuumed out and triple rinsed, and is no longer receiving discharge from the parts washer. However, it is presumed some inaccessible soil contamination remains in place around the concrete vault due to the presence of contaminants adjacent to the building where excavation occurred to the extent practicable and the PMF was subsequently installed.

## **6.2 Recommendations**

Based on the findings and conclusions of this investigation and cleanup, it is recommended that:

- Following Ecology review through the Voluntary Cleanup Program (VCP), closure be granted through the use of institutional controls and long-term monitoring of the groundwater. AEG will draft an Environmental Covenant for Ecology review. The covenant will include a Site figure illustrating the extent of residual contamination contained on Site, and a long-term monitoring plan with a recommended monitoring frequency to ensure the remedial action continues to meet cleanup standards.

## **7.0 LIMITATIONS**

This report summarizes the findings of the services authorized under our agreement with Mr. Robert Graham of Graham Real Ventures, LLC. 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. Robert Graham 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.

## 8.0 REFERENCES

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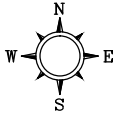
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## **FIGURES**



| FILENAME        | DRAWN BY | CHECKED BY | APPROVED BY | PROJECT NUMBER |
|-----------------|----------|------------|-------------|----------------|
| 15-112_1602.DWG | ICD      | 4/11/2016  | DB          | 4/11/2016      |



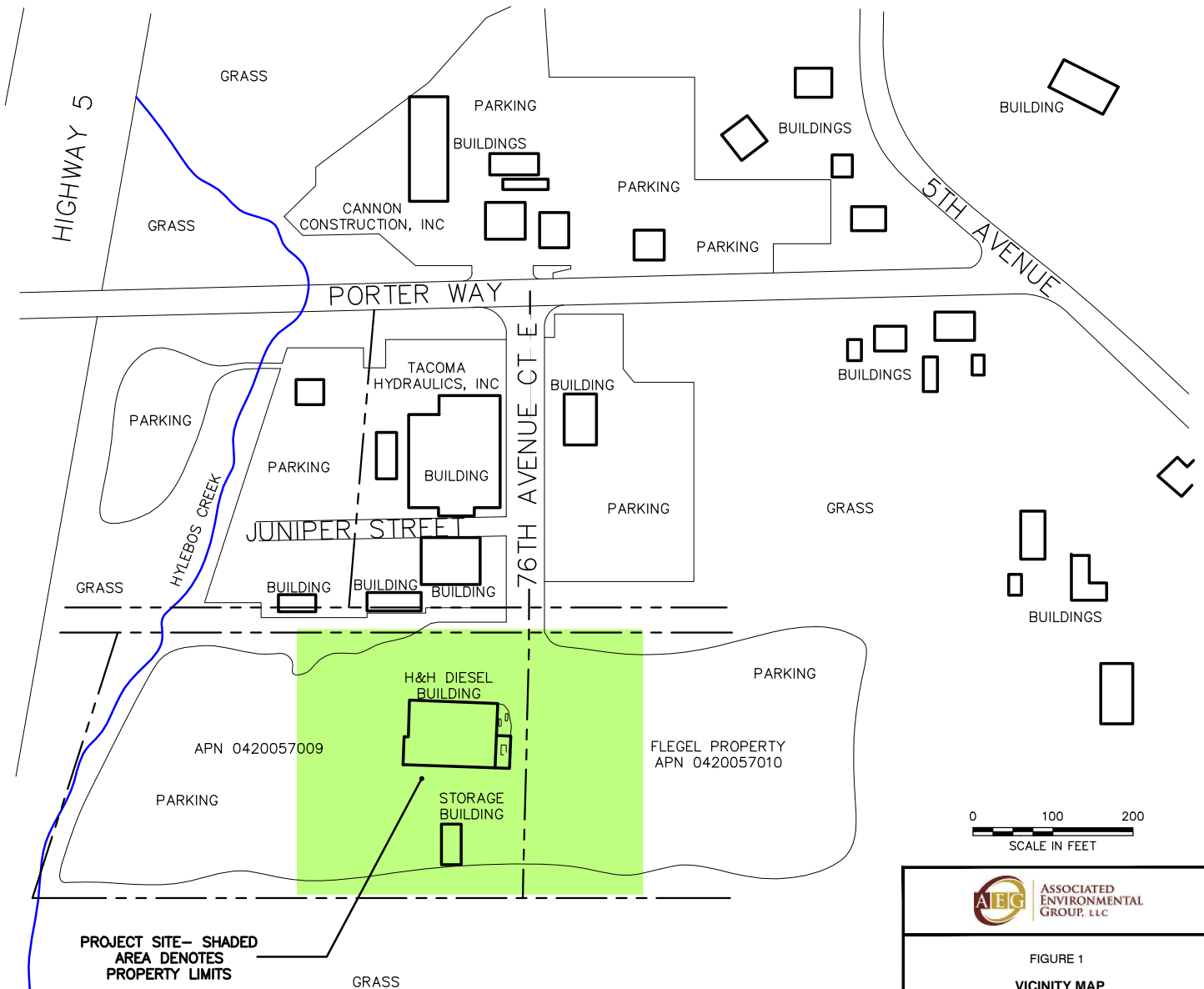
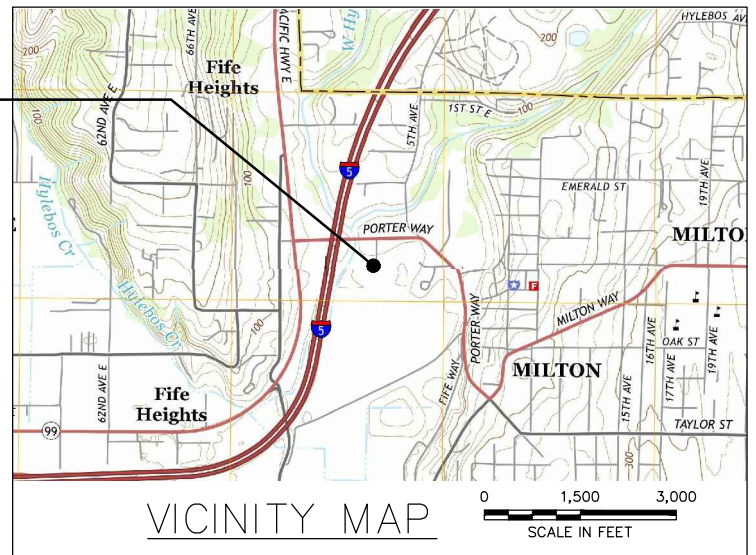
## NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

## REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.  
VICINITY IMAGE SOURCE: U.S. GEOLOGICAL SURVEY-2014, 7.5 MINUTE QUADRANGLE MAP  
POVERTY BAY, WASHINGTON

## PROJECT LOCATION



0 100 200  
SCALE IN FEET



FIGURE 1  
VICINITY MAP

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON

FILENAME

15-112\_1602.DWG

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4/11/2016

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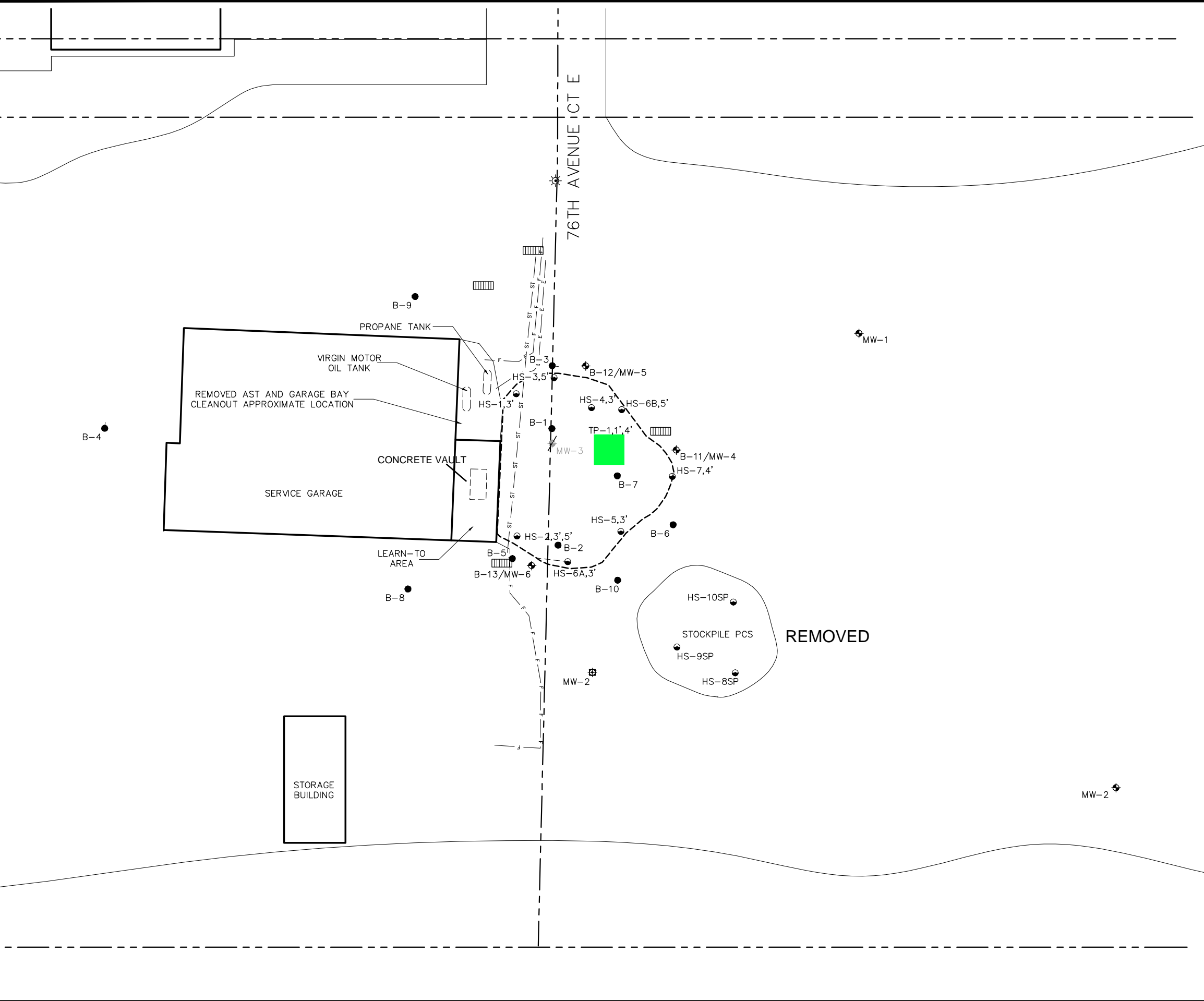
DB

4/11/2016

DB

PROJECT NUMBER

15-112



LEGEND

|         |  |
|---------|--|
| ---     | PROPERTY LINE                                      |
| MW-1    | GROUNDWATER MONITORING WELL LOCATION (AEG)         |
| MW-2    | GROUNDWATER MONITORING WELL LOCATION (ADAPT)       |
| B-1     | SOIL BORING LOCATION                               |
| HS-1,3' | CONFIRMATION SAMPLE LOCATION                       |
| MW-3    | REMOVED GROUNDWATER MONITORING WELL LOCATION (AEG) |
|         | STORM DRAIN/CATCH BASIN                            |
|         | LIGHT POLE   |
| F       | FIBER OPTIC LINE                                   |
| E       | ELECTRIC LINE                                      |
| ST      | STORM WATER LINE                                   |
| ---     | APPROXIMATE LIMIT OF EXCAVATION                    |
|         | TEST PIT SAMPLE LOCATION                           |

NOTES

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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.

02040

SCALE IN FEET

AEG

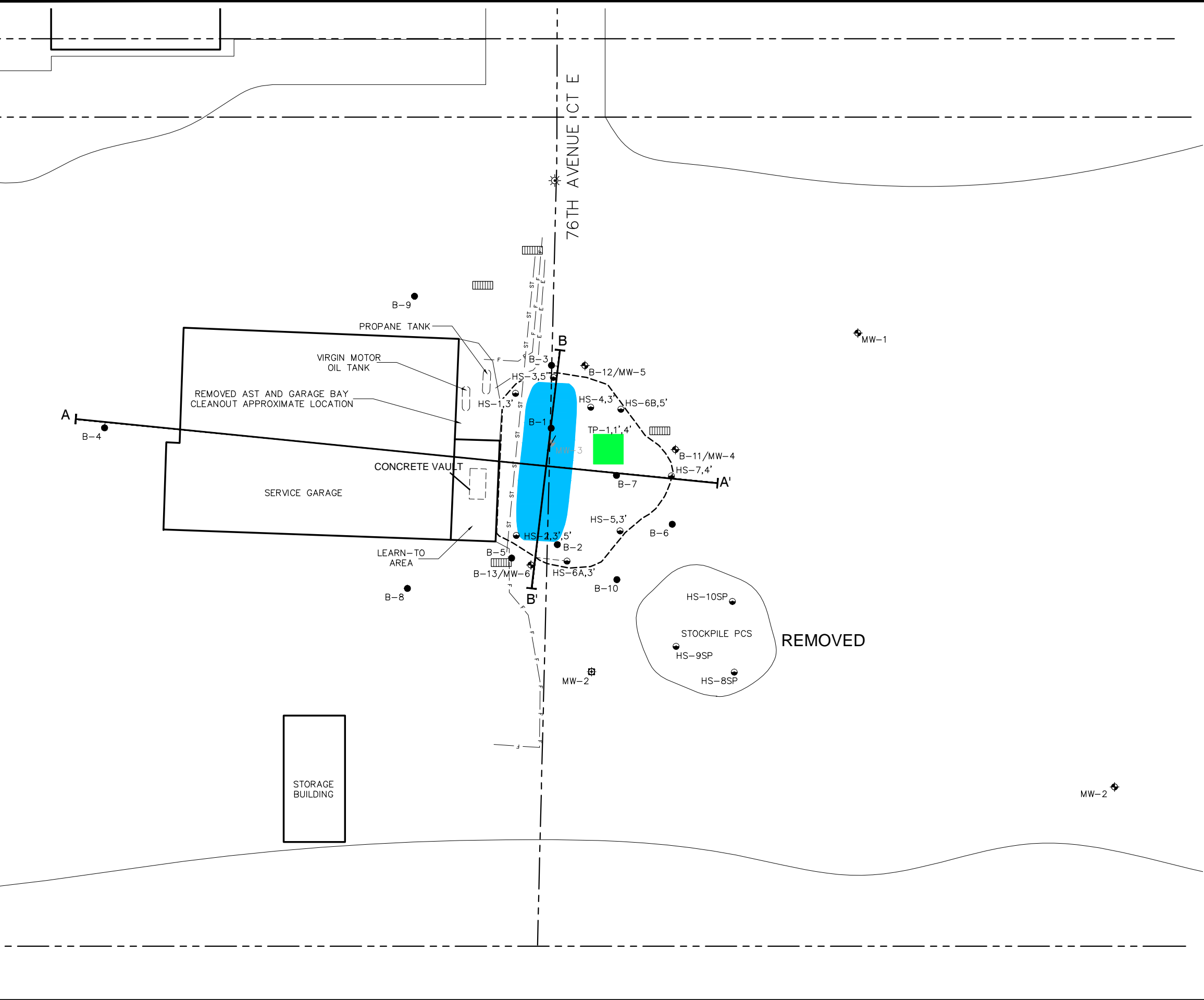
ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 2

SITE MAP

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON

|                 |           |            |             |                |
|-----------------|-----------|------------|-------------|----------------|
| FILENAME        | DRAWN BY  | CHECKED BY | APPROVED BY | PROJECT NUMBER |
| 15-112_1602.DWG | ICD       | DB         | DB          | 15-112         |
|                 | 4/11/2016 | 4/11/2016  | 4/11/2016   |                |



LEGEND

---

PROPERTY LINE

MW-1

GROUNDWATER MONITORING WELL LOCATION (AEG)

MW-2

GROUNDWATER MONITORING WELL LOCATION (ADAPT)

B-1

SOIL BORING LOCATION

HS-1,3'

CONFIRMATION SAMPLE LOCATION

MW-3

REMOVED GROUNDWATER MONITORING WELL LOCATION (AEG)

STORM DRAIN/CATCH BASIN

LIGHT POLE

F

FIBER OPTIC LINE

E

ELECTRIC LINE

ST

STORM WATER LINE

---

APPROXIMATE LIMIT OF EXCAVATION

TEST PIT SAMPLE LOCATION

A-A'

LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE OR BORING/WELL

PERMEABLE MEMBRANE FILTER

- NOTES
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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.

AEG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 3

SAMPLE LOCATIONS

H & H PROPERTY

407 PORTER WAY

MILTON, WASHINGTON

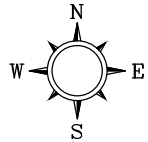
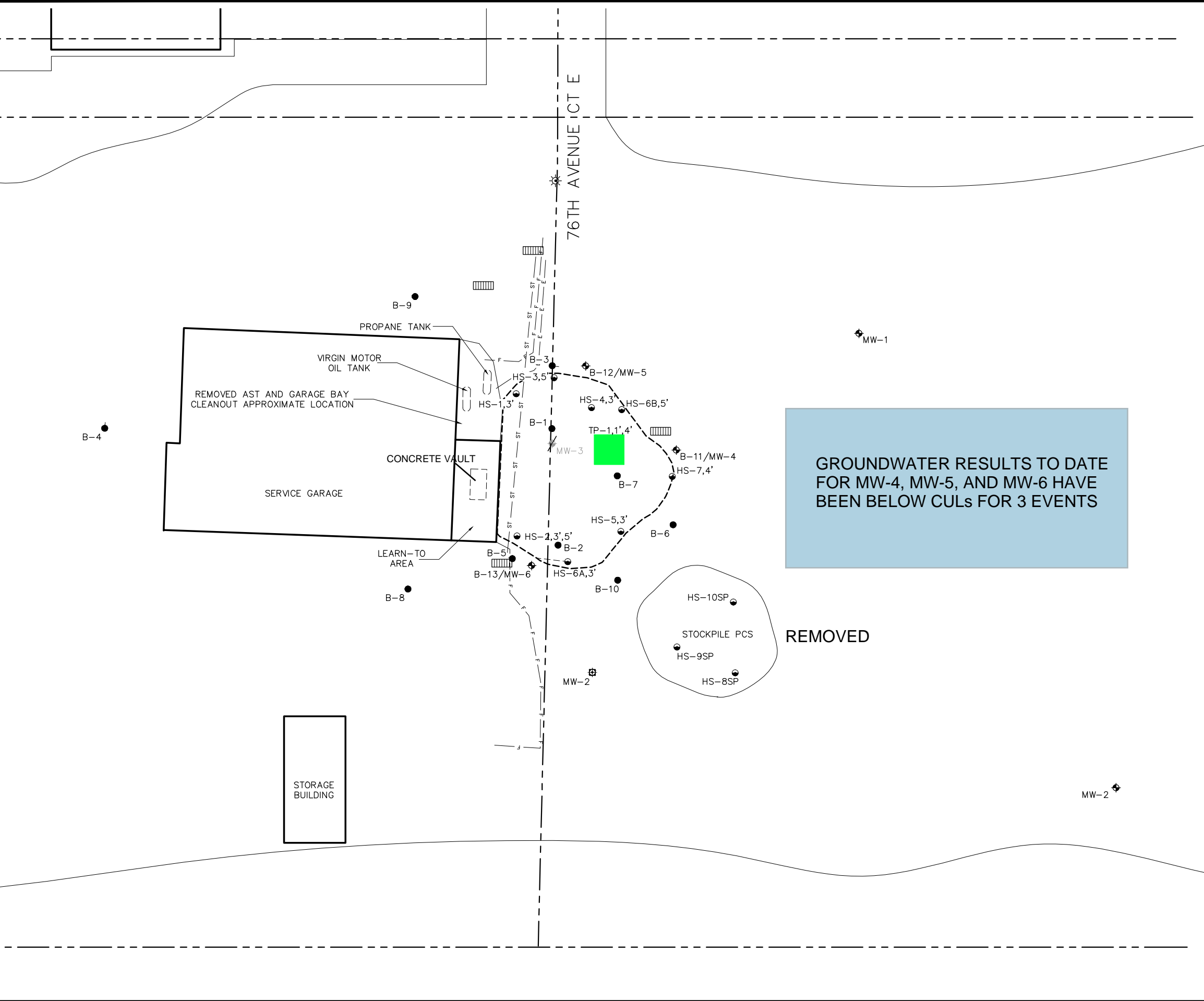
FILENAME  
15-112\_1602.DWG

DRAWN BY  
ICD

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DB

APPROVED BY  
DB

PROJECT NUMBER  
15-112



LEGEND

MW-1

GROUNDWATER MONITORING WELL LOCATION (AEG)

MW-2

GROUNDWATER MONITORING WELL LOCATION (ADAPT)

B-1

SOIL BORING LOCATION

HS-1,3'

CONFIRMATION SAMPLE LOCATION

MW-3

REMOVED GROUNDWATER MONITORING WELL LOCATION (AEG)

STORM DRAIN/CATCH BASIN

LIGHT POLE

F

FIBER OPTIC LINE

E

ELECTRIC LINE

ST

STORM WATER LINE

APPROXIMATE LIMIT OF EXCAVATION

A-A'

TEST PIT SAMPLE LOCATION

LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE OR BORING/WELL

NOTES

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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.



ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 4  
GROUNDWATER PLUME

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON

FILENAME

15-112\_1602.DWG

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4/11/2016

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DB

4/11/2016

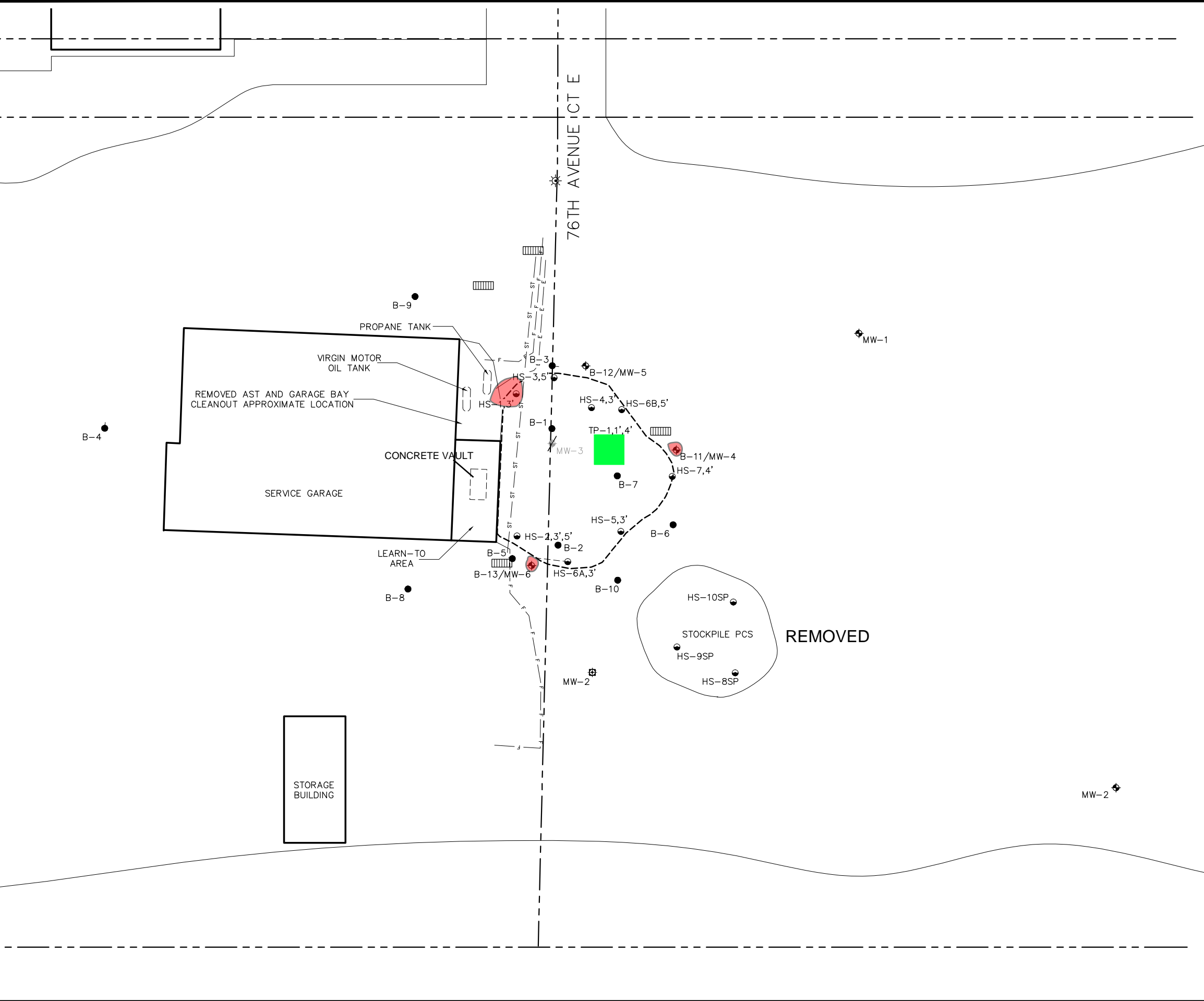
APPROVED BY

DB

4/11/2016

PROJECT NUMBER

15-112



LEGEND

MW-1

Groundwater Monitoring Well Location (AEG)

MW-2

Groundwater Monitoring Well Location (ADAPT)

B-1

Soil Boring Location

HS-1,3'

Confirmation Sample Location

MW-3

Removed Groundwater Monitoring Well Location (AEG)

Storm Drain/Catch Basin

Light Pole

F

Fiber Optic Line

E

Electric Line

ST

Storm Water Line

Approximate Limit of Excavation

Test Pit Sample Location

A-A'

Line of Lithologic Cross Section and Projection Line or Boring/Well

Soil Exceeding MTCA Method A CUL for Gasoline-Range

- NOTES
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2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

REFERENCE

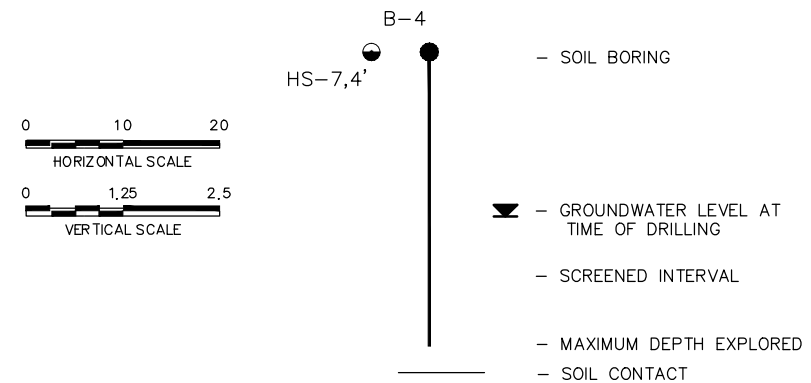
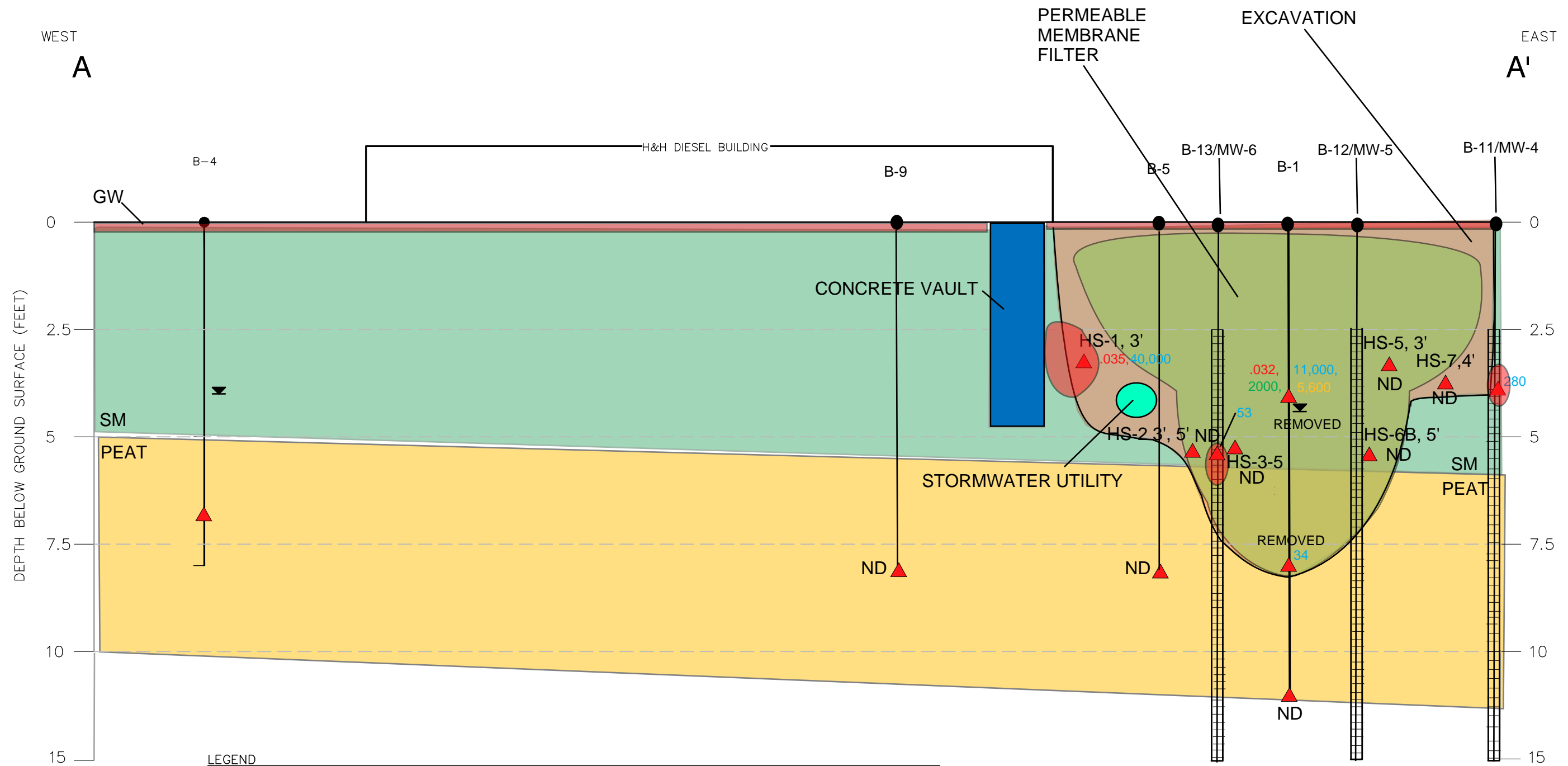
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AEG

ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 5  
SOIL PLUME

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON



|   |   |
|---|---|
| GP  | POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES |
| SW  | WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES           |
| OH  | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS       |
| OL  | ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY         |
|  | GASOLINE-RANGE CONTAMINANTS ABOVE ABOVE MTCA METHOD A CULs      |
|  | SAMPLE LOCATION   |
| ND  | NON DETECTED COC ABOVE LABORATORY PQL OR >MTCA CUL              |

|     |   |
|-----|---|
| 100 | BENZENE MG/KG FOUND<br>IN SOIL ABOVE MTCA                                       |
| 100 | GASOLINE-RANGE TOTAL<br>PETROL HYDROCARBON<br>MG/KG FOUND IN SOIL<br>ABOVE MTCA |
| 100 | DIESEL-RANGE TOTAL<br>PETROL HYDROCARBON<br>MG/KG FOUND IN SOIL<br>ABOVE MTCA   |
| 100 | OIL-RANGE TOTAL<br>PETROL HYDROCARBON<br>MG/KG FOUND IN SOIL ABOVE MTCA         |



FIGURE 6

GEOLOGIC CROSS SECTION A-A'

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON

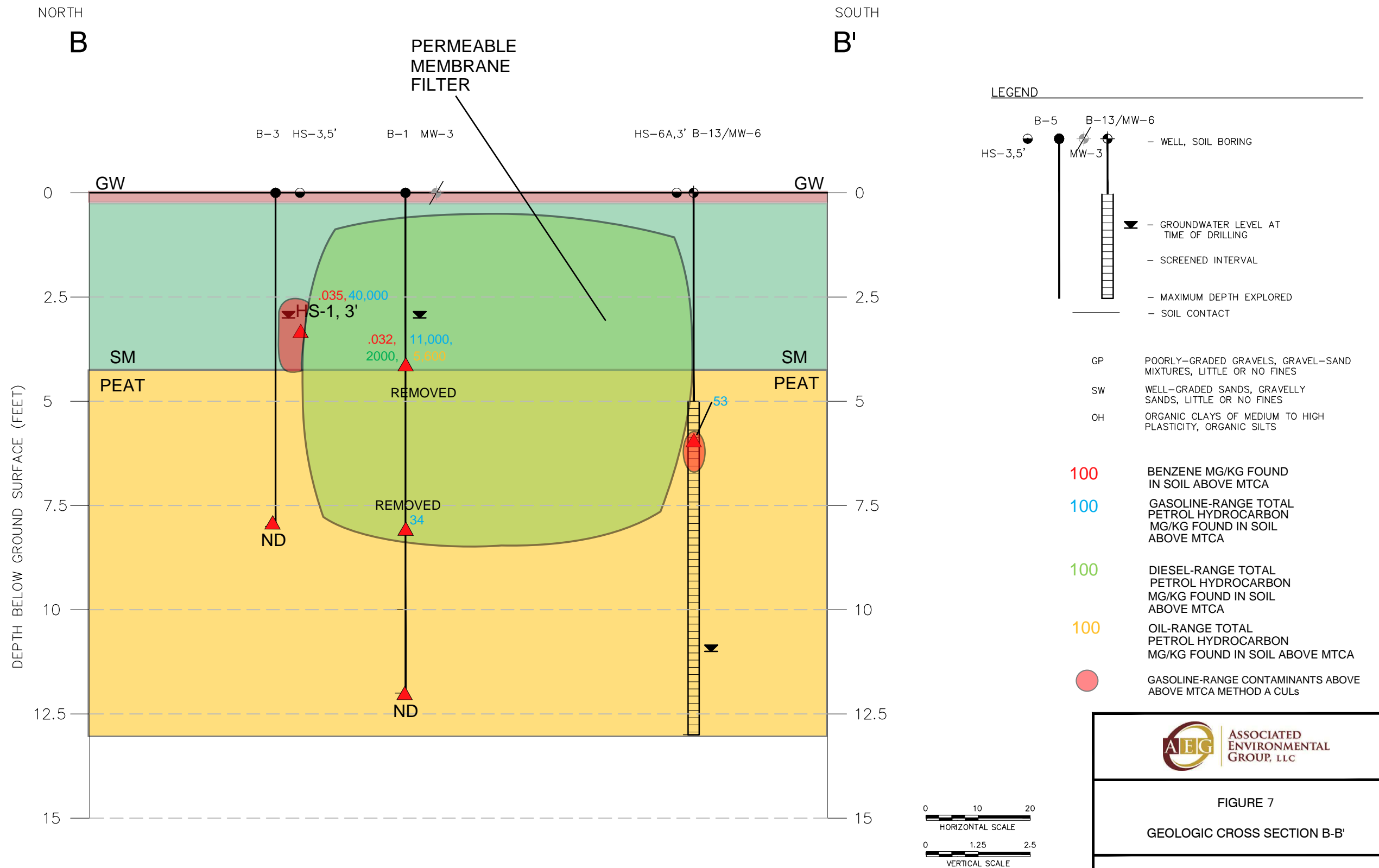


FIGURE 7  
GEOLOGIC CROSS SECTION B-B'

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON



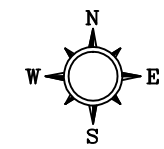
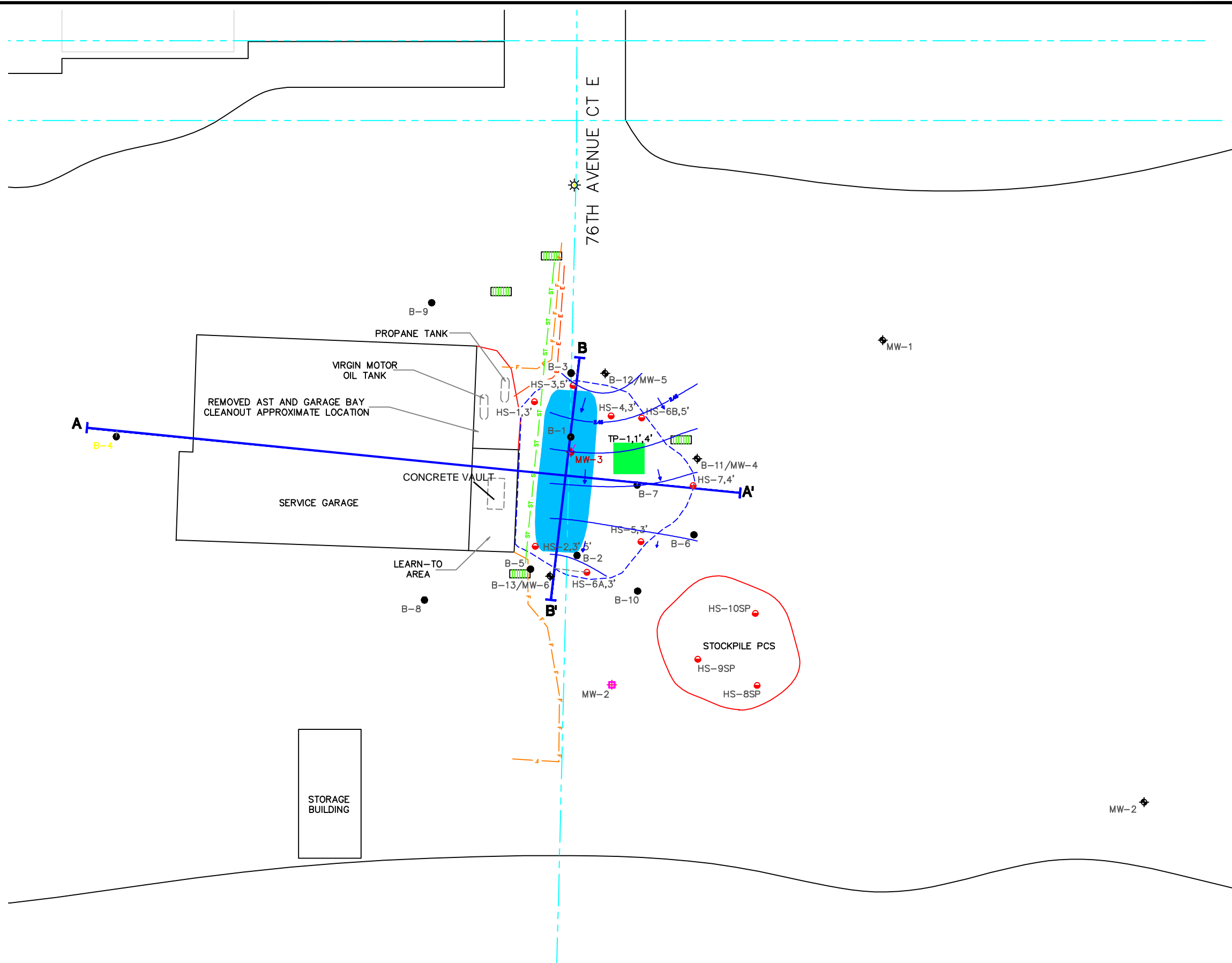
PROJECT  
NUMBER 15-112

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DB 4/21/2016

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ICD 4/21/2016

FILENAME  
15-112\_1602.DWG




- LEGEND**
- PROPERTY LINE
  - MW-1 GROUNDWATER MONITORING WELL LOCATION (AEG)
  - MW-2 GROUNDWATER MONITORING WELL LOCATION (ADAPT)
  - B-1 SOIL BORING LOCATION
  - HS-1,3' CONFIRMATION SAMPLE LOCATION
  - MW-3 REMOVED GROUNDWATER MONITORING WELL LOCATION (AEG)
  - STORM DRAIN/CATCH BASIN
  - LIGHT POLE
  - F FIBER OPTIC LINE
  - E ELECTRIC LINE
  - ST STORM WATER LINE
  - APPROXIMATE LIMIT OF EXCAVATION
  - TEST PIT SAMPLE LOCATION
  - A-A' LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE OR BORING/WELL

- NOTES**
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**REFERENCE**

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FIGURE 8

OCTOBER 2015  
GROUNDWATER CONTOUR MAP

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON



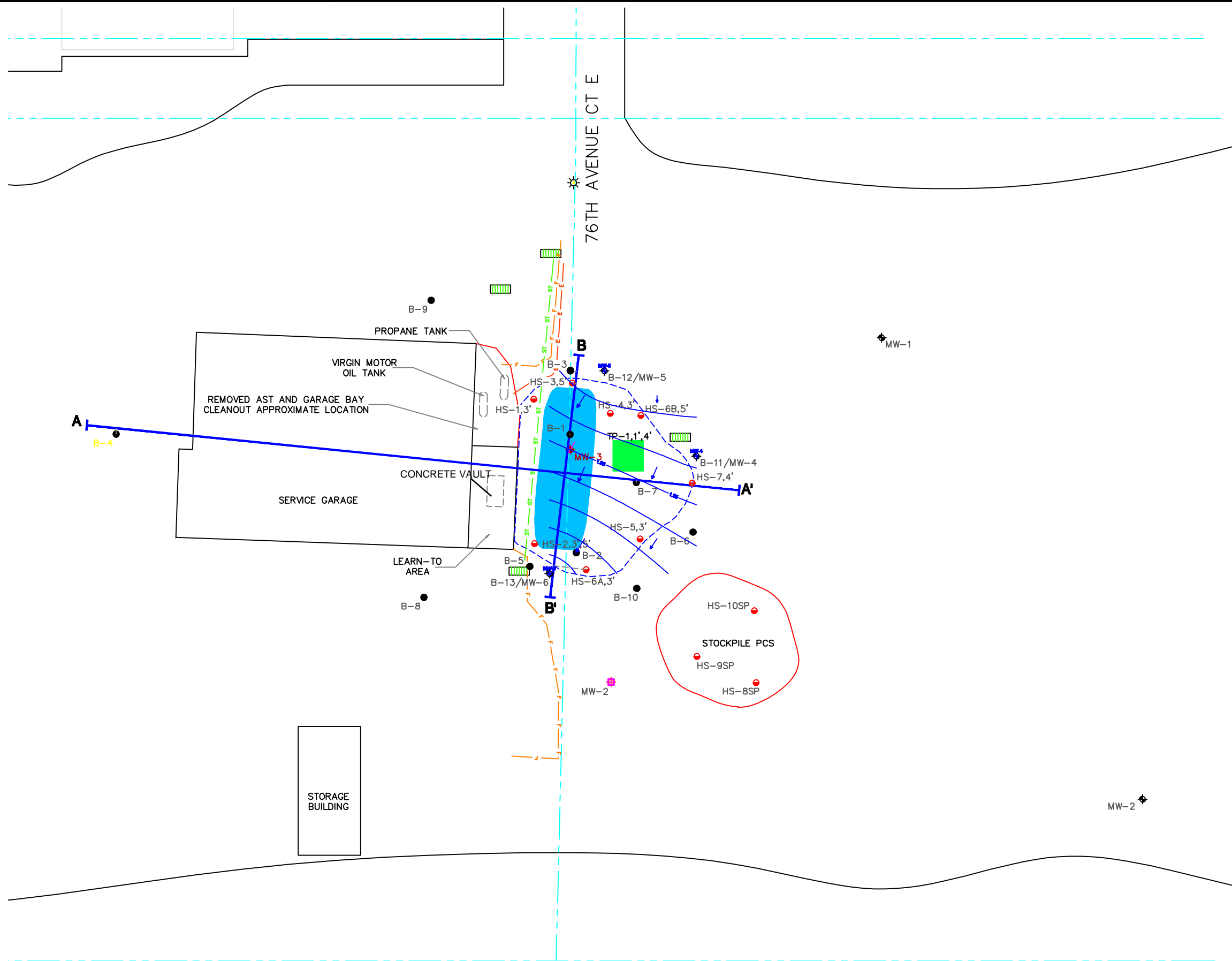
PROJECT  
NUMBER 15-112

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DB 4/21/2016

CHECKED BY  
DB 4/21/2016

DRAWN BY  
ICD 4/21/2016

FILENAME  
15-112\_1602.DWG



#### LEGEND

- PROPERTY LINE
- MW-1 GROUNDWATER MONITORING WELL LOCATION (AEG)
- MW-2 GROUNDWATER MONITORING WELL LOCATION (ADAPT)
- B-1 SOIL BORING LOCATION
- HS-1,3' CONFIRMATION SAMPLE LOCATION
- MW-3 REMOVED GROUNDWATER MONITORING WELL LOCATION (AEG)
- STORM DRAIN/CATCH BASIN
- LIGHT POLE
- FIBER OPTIC LINE
- ELECTRIC LINE
- STORM WATER LINE
- APPROXIMATE LIMIT OF EXCAVATION
- TEST PIT SAMPLE LOCATION
- LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE OR BORING/WELL

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#### REFERENCE

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0 20 40  
SCALE IN FEET



FIGURE 9  
MARCH 2016  
GROUNDWATER CONTOUR MAP

H & H PROPERTY  
407 PORTER WAY  
MILTON, WASHINGTON

## **TABLES**

**Table 1 - Summary of Excavation (Soil) Analytical Results (VOC, TPH)**

H&H Property  
Milton, Washington

| Sample Number                        | Sample Type | Depth Collected (feet) | Date Collected | Selected Volatile Organic Compounds (mg/kg) |              |              |             |                  |                 |                        |                        |                   |                  |             | Total Petroleum Hydrocarbons (TPH) (mg/kg) |             |              |
|--------------------------------------|-------------|------------------------|----------------|---|--------------|--------------|-------------|------------------|-----------------|------------------------|------------------------|-------------------|------------------|-------------|--|-------------|--------------|
|                                      |             |                        |                | Benzene                                     | Toluene      | Ethylbenzene | Xylenes     | Isopropylbenzene | n-Propylbenzene | 1,3,5-Trimethylbenzene | 1,2,4-Trimethylbenzene | sec- Butylbenzene | Isopropyltoluene | Naphthalene | Gasoline                                   | Diesel      | Heavy Oil    |
| TP-1 1'                              | P X         | 1'                     | 8/26/2015      | <0.02                                       | <0.05        | <0.05        | <b>0.15</b> | --               | --              | --                     | --                     | --                | --               | --          | <b>210</b>                                 | <50         | <b>160</b>   |
| TP-1 4'                              | P X         | 4'                     | 8/26/2015      | <0.02                                       | <b>1.1</b>   | <b>0.47</b>  | <b>18</b>   | --               | --              | --                     | --                     | --                | --               | --          | <b>8,800</b>                               | <b>1200</b> | <b>2,600</b> |
| HS-1 3'                              | P           | 3'                     | 8/26/2015      | <b>0.035</b>                                | <b>1.7</b>   | <b>12</b>    | <b>57</b>   | <b>11</b>        | <b>35</b>       | <b>89</b>              | <b>180</b>             | <b>55</b>         | <0.05            | <b>5.4</b>  | <b>40,000</b>                              | <b>900</b>  | <b>2,500</b> |
| HS-2 3'                              | P           | 3'                     | 8/26/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>110</b>                                 | <50         | <b>180</b>   |
| HS-2 5'                              | P           | 5'                     | 8/26/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | <0.05            | <0.05           | <b>0.074</b>           | <b>0.19</b>            | <0.05             | <b>0.066</b>     | <0.02       | <b>92</b>                                  | <50         | <b>130</b>   |
| HS-3 5'                              | P           | 5'                     | 8/27/2015      | <0.02                                       | <b>0.15</b>  | <b>0.24</b>  | <b>1</b>    | --               | --              | --                     | --                     | --                | --               | --          | <b>130</b>                                 | <50         | <b>1,700</b> |
| HS-4 3'                              | P X         | 3'                     | 8/27/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>47</b>                                  | <50         | <b>1,200</b> |
| HS-5 3'                              | C           | 3'                     | 8/27/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>21</b>                                  | <50         | <b>100</b>   |
| HS-6A 3'                             | C           | 3'                     | 8/27/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>27</b>                                  | <50         | <b>120</b>   |
| HS-6B 5'                             | C           | 5'                     | 9/10/2015      | <0.02                                       | <b>0.051</b> | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>13</b>                                  | <50         | <b>310</b>   |
| HS-7 4'                              | C           | 4'                     | 9/10/2015      | <0.02                                       | <b>0.087</b> | <b>0.052</b> | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>20</b>                                  | <50         | <b>230</b>   |
| HS-8SP                               | SP          | 1'                     | 9/11/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>230</b>                                 | <b>77</b>   | <b>400</b>   |
| HS-9SP                               | SP          | 1'                     | 9/11/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>280</b>                                 | <b>120</b>  | <b>390</b>   |
| HS-10SP                              | SP          | 1'                     | 9/11/2015      | <0.02                                       | <0.05        | <0.05        | <0.15       | --               | --              | --                     | --                     | --                | --               | --          | <b>28</b>                                  | <50         | <b>270</b>   |
| PQL (mg/kg)                          |             |                        |                | 0.02  | 0.05         | 0.05         | 0.15        | 0.05             | 0.05            | 0.05                   | 0.05                   | 0.05              | 0.05             | 0.02        | 10   | 50          | 100          |
| MTCA Method A Cleanup Levels (mg/kg) |             |                        |                | 0.03  | 7            | 6            | 9           | 800**            | 800**           | 800**                  | N/A                    | 800**             | N/A              | 5           | 30*  | 2,000       | 2,000        |

Notes:

mg/kg = milligrams per kilogram

-- Not analyzed for constituent

< Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

\* TPH-Gasoline Cleanup Level with the presence of Benzene anywhere at the Site

\*\* Method B Cleanup levels

P = Performance Sample

X = Excavated/Removed

C = Confirmation Sample

SP = Stockpile Samples/Representative of removed soils

**Table 2 - Summary of Excavation (Soil) Analytical Results (PAH, PCB, Metals)**

H&H Property  
Milton, Washington

| Sample Number                        | Sample Type | Depth Collected (feet) | Date Collected | Polynuclear Aromatic Hydrocarbons (mg/kg) |                     |             |                |            |              | Polychlorinated Biphenyl (mg/kg) | MTCA 5 Total Metals (mg/kg) |         |           |                     |            |         |
|--------------------------------------|-------------|------------------------|----------------|---|---------------------|-------------|----------------|------------|--------------|----------------------------------|-----------------------------|---------|-----------|---------------------|------------|---------|
|                                      |             |                        |                | 2-Methylnaphthalene                       | 1-Methylnaphthalene | Naphthalene | Acenaphthylene | Fluorene   | Phenanthrene |                                  | Lead                        | Cadmium | Chromium  | Hexavalent Chromium | Arsenic    | Mercury |
| TP-1 1'                              | P X         | 1'                     | 8/26/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| TP-1 4'                              | P X         | 4'                     | 8/26/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-1 3'                              | P           | 3'                     | 8/26/2015      | <b>15</b>                                 | <b>12</b>           | <b>9.2</b>  | <b>0.09</b>    | <b>1.6</b> | <b>2.5</b>   | <b>0.02</b>                      | <5.0                        | <1.0    | <b>23</b> | <0.01               | <5.0       | <5.0    |
| HS-2 3'                              | P           | 3'                     | 8/26/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-2 5'                              | P           | 5'                     | 8/26/2015      | <b>0.11</b>                               | <b>0.11</b>         | <0.02       | <0.02          | <0.02      | <0.02        | <0.01                            | <b>7.3</b>                  | <1.0    | <b>27</b> | <0.01               | <b>7</b>   | <5.0    |
| HS-3 5'                              | P           | 5'                     | 8/27/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-4 3'                              | P X         | 3'                     | 8/27/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-5 3'                              | C           | 3'                     | 8/27/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-6A 3'                             | C           | 3'                     | 8/27/2015      | --  | --                  | --          | --             | --         | --           | --                               | --                          | --      | --        | --                  | --         | --      |
| HS-6B 5'                             | C           | 5'                     | 9/10/2015      | --  | --                  | --          | --             | --         | --           | --                               | <b>45</b>                   | <0.01   | <b>12</b> | <0.01               | <b>7</b>   | <0.05   |
| HS-7 4'                              | C           | 4'                     | 9/10/2015      | --  | --                  | --          | --             | --         | --           | --                               | <b>76</b>                   | <0.01   | <b>27</b> | <0.01               | <b>7.4</b> | <0.05   |
| HS-8SP                               | SP          | 1'                     | 9/11/2015      | --  | --                  | --          | --             | --         | --           | --                               | <b>44</b>                   | <0.01   | <b>52</b> | <0.01               | <b>8.1</b> | <0.05   |
| HS-9SP                               | SP          | 1'                     | 9/11/2015      | --  | --                  | --          | --             | --         | --           | --                               | <b>25</b>                   | <0.01   | <b>41</b> | <0.01               | <b>5</b>   | <0.05   |
| HS-10SP                              | SP          | 1'                     | 9/11/2015      | --  | --                  | --          | --             | --         | --           | --                               | <b>59</b>                   | <0.01   | <b>36</b> | <0.01               | <b>8.4</b> | <0.05   |
| PQL (mg/kg)                          |             |                        |                | 0.02                                      | 0.02                | 0.02        | 0.02           | 0.02       | 0.02         | 0.01                             | 5.0                         | 1.0     | 5.0       | 0.1                 | 5.0        | 0.5     |
| MTCA Method A Cleanup Levels (mg/kg) |             |                        |                | 320                                       | 5,600               | 5           | 4,800          | 3,200      | N/A          | 1                                | 250                         | 2       | 19/2000*  | 19                  | 20         | 2       |

Notes:

mg/kg = milligrams per kilogram

-- Not analyzed for constituent

< Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

\* Soil cleanup level for Chromium VI is 19 mg/Kg & Chromium III is 2,000 mg/Kg

P = Performance Sample

X = Excavated/Removed

C = Confirmation Sample

SP = Stockpile Samples/Representative of removed soils

**Table 3 - Summary of (Soil Borings) Soil Analytical Results**

H&H Property  
Milton, Washington

| Sample Number                        | Depth Collected (feet) | Date Collected | BTEX (mg/kg) |             |              |             | Total Petroleum Hydrocarbons (TPH) (mg/kg) |              |              | MTCA 5 Total Metals (mg/kg) |         |              |         |         | Naphthalene (mg/kg) |
|--------------------------------------|------------------------|----------------|--------------|-------------|--------------|-------------|--|--------------|--------------|-----------------------------|---------|--------------|---------|---------|---------------------|
|                                      |                        |                | Benzene      | Toluene     | Ethylbenzene | Xylenes     | Gasoline                                   | Diesel       | Heavy Oil    | Lead                        | Cadmium | Chromium III | Arsenic | Mercury |                     |
| B1-S1-4                              | 4.0                    | 3/24/2015      | <b>0.032</b> | <b>0.98</b> | <b>1.5</b>   | <b>10</b>   | <b>11,000</b>                              | <b>2,000</b> | <b>5,600</b> | <b>21</b>                   | <1.0    | <b>19</b>    | <5.0    | <0.5    | --                  |
| B1-S2-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <b>34</b>                                  | <50          | <100         | <5.0                        | <1.0    | <b>23</b>    | <5.0    | <0.5    | --                  |
| B1-S3-12                             | 12.0                   | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <b>110</b>   | <5.0                        | <1.0    | <5.0         | <5.0    | <0.5    | --                  |
| B2-S1-4                              | 4.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <b>9.1</b>                  | <1.0    | <b>34</b>    | <5.0    | <0.5    | --                  |
| B2-S2-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>28</b>    | <5.0    | <0.5    | --                  |
| B2-S3-10                             | 10.0                   | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>23</b>    | <5.0    | <0.5    | --                  |
| B3-S1-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>26</b>    | <5.0    | <0.5    | --                  |
| B4-S1-7                              | 7.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>26</b>    | <5.0    | <0.5    | --                  |
| B5-S1-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>29</b>    | <5.0    | <0.5    | --                  |
| B8-S1-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>26</b>    | <5.0    | <0.5    | --                  |
| B9-S1-8                              | 8.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>28</b>    | <5.0    | <0.5    | --                  |
| B10-S1-2                             | 2.0                    | 3/24/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <10  | <50          | <100         | <5.0                        | <1.0    | <b>24</b>    | <5.0    | <0.5    | --                  |
| B11-MW4-5                            | 4.0                    | 9/29/2015      | <0.02        | <0.05       | <b>1.9</b>   | <0.15       | <b>280</b>                                 | <b>370</b>   | <100         | --                          | --      | --           | --      | --      | <b>0.48</b>         |
| B12-MW5-5                            | 5.0                    | 9/29/2015      | <0.02        | <0.05       | <b>0.14</b>  | <b>0.82</b> | <b>38</b>                                  | <50          | <100         | --                          | --      | --           | --      | --      | <b>0.29</b>         |
| B13-MW6-5                            | 5.0                    | 9/29/2015      | <0.02        | <0.05       | <0.05        | <0.15       | <b>53</b>                                  | <50          | <b>630</b>   | --                          | --      | --           | --      | --      | <b>0.21</b>         |
| PQL (mg/kg)                          |                        |                | 0.02         | 0.05        | 0.05         | 0.15        | 10   | 50           | 100          | 5.0                         | 1.0     | 5.0          | 5.0     | 0.5     | <0.05               |
| MTCA Method A Cleanup Levels (mg/kg) |                        |                | 0.03         | 7           | 6            | 9           | 30*  | 2,000        | 2,000        | 250                         | 2       | 19/2000**    | 20      | 2       | 5                   |

Notes:

mg/kg = milligrams per kilogram

-- Not analyzed for constituent

< Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

\* TPH-Gasoline Cleanup Level with the presence of Benzene anywhere at the Site

\*\* Soil cleanup level for Chromium VI is 19 mg/Kg & Chromium III is 2,000 mg/Kg

**Table 4 - Summary of Quarterly Groundwater Analytical Results - TPH & Metals**  
H&H Property  
Milton, WA

| Monitoring Well                      | Date Sampled | Gasoline TPH (ug/L) | Diesel Extended TPH (ug/L) |               |             | MTCA 5 Metals (ug/L) - Total Metals |             |            |             |             | Dissolved Metals (ug/L) |             |
|--------------------------------------|--------------|---------------------|----------------------------|---------------|-------------|-------------------------------------|-------------|------------|-------------|-------------|-------------------------|-------------|
|                                      |              |                     | Diesel                     | Heavy Oil     | Mineral Oil | Mercury                             | Lead        | Cadmium    | Chromium    | Arsenic     | Lead                    | Arsenic     |
| AEG MW-1                             | 5/28/09      | <100                | <200                       | <400          | <400        | <0.5                                | <b>6.6</b>  | <1.0       | <10         | <b>50.9</b> | --                      | --          |
|                                      | 9/11/09      | <b>156</b>          | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>70</b>   | <5.0                    | <b>60</b>   |
|                                      | 12/18/09     | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>50.3</b> | <5.0                    | <b>44.4</b> |
|                                      | 4/5/10       | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>44.2</b> | <5.0                    | <b>31.7</b> |
| AEG MW-2                             | 3/18/15      | --                  | <200                       | <400          | --          | <0.5                                | <5.0        | <0.5       | <5.0        | <b>47.8</b> | --                      | <b>23.9</b> |
|                                      | 5/28/09      | <100                | <200                       | <400          | <400        | <0.5                                | <b>40.7</b> | <1.0       | <b>27.7</b> | <b>102</b>  | --                      | --          |
|                                      | 9/11/09      | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>203</b>  | <5.0                    | <b>183</b>  |
|                                      | 12/18/09     | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>202</b>  | <5.0                    | <b>169</b>  |
|                                      | 4/5/10       | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>91.9</b> | <5.0                    | <b>32.4</b> |
| AEG MW-3                             | 3/18/15      | --                  | <200                       | <400          | --          | <0.5                                | <5.0        | <0.5       | <5.0        | <b>164</b>  | --                      | <b>108</b>  |
|                                      | 5/28/09      | <100                | <b>700</b>                 | <400          | <400        | <0.5                                | <5.0        | <1.0       | <b>7.8</b>  | <b>20.4</b> | --                      | --          |
|                                      | 9/22/09      | <b>370</b>          | <200                       | <b>1,470</b>  | <400        | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 12/18/09     | <b>760</b>          | <200                       | <400          | <400        | --                                  | --          | --         | --          | --          | --                      | --          |
| ADAPT MW-2                           | 4/5/10       | <100                | <b>995</b>                 | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>29.9</b> | <5.0                    | <b>10.4</b> |
|                                      | 5/28/09      | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <5.0        | --                      | --          |
|                                      | 9/11/09      | <b>205</b>          | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>13</b>   | <5.0                    | <b>12.3</b> |
|                                      | 12/18/09     | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <5.0        | <5.0                    | <b>11</b>   |
|                                      | 4/5/10       | <100                | <200                       | <400          | <400        | <0.5                                | <5.0        | <1.0       | <10         | <b>12.4</b> | <5.0                    | <b>7.4</b>  |
| B-1                                  | 3/24/2015    | <b>39,000</b>       | <b>26,000</b>              | <b>49,000</b> | --          | <b>16</b>                           | <2.0        | <b>15</b>  | <b>21</b>   | <1.0        | <b>6.3</b>              | <b>17</b>   |
| B-2                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <2.0                                | <2.0        | <10        | <b>57</b>   | <1.0        | <2.0                    | <b>50</b>   |
| B-3                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <2.0                                | <2.0        | <b>10</b>  | <b>54</b>   | <1.0        | <2.0                    | <b>37</b>   |
| B-4                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <b>5.4</b>                          | <2.0        | <10        | <b>52</b>   | <1.0        | <b>2.8</b>              | <b>48</b>   |
| B-5                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <2.0                                | <2.0        | <10        | <b>56</b>   | <1.0        | <2.0                    | <b>52</b>   |
| B-6                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <b>7.8</b>                          | <2.0        | <10        | <b>4.9</b>  | <1.0        | <b>2.1</b>              | <b>3.7</b>  |
| B-7                                  | 3/24/2015    | <100                | <250                       | <b>980</b>    | --          | <b>30</b>                           | <2.0        | <10        | <b>22</b>   | <1.0        | <b>15</b>               | <b>15</b>   |
| B-8                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <2.0                                | <2.0        | <10        | <b>53</b>   | <1.0        | <2.0                    | <b>48</b>   |
| B-9                                  | 3/24/2015    | <100                | <250                       | <500          | --          | <2.0                                | <2.0        | <10        | <b>35</b>   | <1.0        | <2.0                    | <b>33</b>   |
| B-10                                 | 3/24/2015    | <100                | <250                       | <b>1,800</b>  | --          | <b>38</b>                           | <2.0        | <10        | <b>17</b>   | <1.0        | <b>11</b>               | <b>11</b>   |
| MW-4                                 | 10/8/15      | <b>130</b>          | <250** /                   | <500** /      | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 1/27/2016*   | --                  | --                         | --            | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 4/1/16       | <100                | <250                       | <500          | --          | --                                  | --          | --         | --          | --          | --                      | --          |
| MW-5                                 | 10/8/15      | <100                | <250** /                   | <500** /      | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 1/27/16      | <b>220</b>          | <250                       | <500          | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 4/1/16       | <b>270</b>          | <250                       | <500          | --          | --                                  | --          | --         | --          | --          | --                      | --          |
| MW-6                                 | 10/8/15      | <100                | <250** /                   | <500** /      | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 1/27/16      | <100                | <250                       | <500          | --          | --                                  | --          | --         | --          | --          | --                      | --          |
|                                      | 4/1/16       | <100                | <250                       | <500          | --          | --                                  | --          | --         | --          | --          | --                      | --          |
| PQL                                  |              | 100                 | 200                        | 400           | 400         | 0.5                                 | 5.0         | 1.0 or 0.5 | 10          | 5.0         | 5.0                     | 5.0         |
| Ecology MTCA Method A Cleanup Levels |              | 800***              | 500                        | 500           | 500         | 2                                   | 15          | 5          | 50          | 5           | 15                      | 5           |

Notes:

ug/L = micrograms per liter

-- = Not analyzed for constituent

< = Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

\* Not sampled; well was covered with soil and could not be located. Metal detector used to locate for next event.

\*\* Analyzed with Silica Gel Clean Up

\*\*\* TPH-Gasoline Cleanup Level with the presence of Benzene anywhere at the Site

**Table 5 - Summary of Quarterly Groundwater Analytical Results - Selected VOC**  
H&H Property  
Milton, WA

| Monitoring Well                      | Date Sampled | Select Volatile Organic Compounds (ug/L) |             |              |               |                        |                  |                          |                         |             |                     |                     |                     |                   |                |
|--------------------------------------|--------------|--|-------------|--------------|---------------|------------------------|------------------|--------------------------|-------------------------|-------------|---------------------|---------------------|---------------------|-------------------|----------------|
|                                      |              | Benzene                                  | Toluene     | Ethylbenzene | Total Xylenes | 1,3,5 Trimethylbenzene | Isopropyltoluene | 1,2-Dichloroethane (EDC) | 1,2-Dibromoethane (EDB) | Naphthalene | 2-Methylnaphthalene | 1-Methylnaphthalene | Tetrachloroethylene | Trichloroethylene | Vinyl Chloride |
| AEG MW1-W                            | 5/28/09      | <1                                       | <b>14.3</b> | <1           | <3            | <1                     | <1               | <1                       | <0.01                   | <b>7.7</b>  | --                  | --                  | <1                  | <1                | <0.20          |
|                                      | 9/11/09      | <1                                       | <b>136</b>  | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 12/18/09     | <1                                       | <b>27</b>   | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 4/5/10       | <b>1.3</b>                               | <b>2.9</b>  | <1           | <b>3.6</b>    | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| AEG MW2-W                            | 5/28/09      | <1                                       | <1          | <1           | <3            | <1                     | <1               | <1                       | <0.01                   | <5          | --                  | --                  | <1                  | <1                | <0.20          |
|                                      | 9/11/09      | <1                                       | <b>14.7</b> | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 12/18/09     | <1                                       | <b>1.7</b>  | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 4/5/10       | <1                                       | <2          | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| AEG MW3-W                            | 5/28/09      | <b>1.5</b>                               | <b>11.1</b> | <b>6.5</b>   | <b>54.5</b>   | <b>37.4</b>            | <b>10.8</b>      | <1                       | <0.01                   | <b>89.2</b> | --                  | --                  | <1                  | <1                | <0.20          |
|                                      | 9/22/09      | <1                                       | <2          | <b>2.6</b>   | <b>15.3</b>   | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 12/18/09     | <b>1.4</b>                               | <b>1.9</b>  | <b>3.4</b>   | <b>26</b>     | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 4/5/10       | <1                                       | <b>4.9</b>  | <b>2.7</b>   | <b>32</b>     | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| ADAPT MW2-W                          | 5/28/09      | <1                                       | <1          | <1           | <3            | <1                     | <1               | <1                       | <0.01                   | <5          | --                  | --                  | <1                  | <1                | <0.20          |
|                                      | 9/11/09      | <1                                       | <1          | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 12/18/09     | <1                                       | <1          | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 4/5/10       | <1                                       | <2          | <1           | <3            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-1                                  | 3/24/2015    | <b>1.4</b>                               | <b>14</b>   | <b>11</b>    | <b>180</b>    | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-2                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-3                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-4                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <b>4.4</b>    | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-5                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-6                                  | 3/24/2015    | <1.0                                     | <b>1.3</b>  | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-7                                  | 3/24/2015    | <1.0                                     | <b>2.7</b>  | <1.0         | <b>5.9</b>    | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-8                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-9                                  | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| B-10                                 | 3/24/2015    | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
| MW-4                                 | 10/8/15      | <1.0                                     | <b>47.0</b> | <b>1.1</b>   | <b>6.7</b>    | --                     | --               | --                       | --                      | <b>0.40</b> | <0.1                | <0.1                | --                  | --                | --             |
|                                      | 1/27/16*     | --                                       | --          | --           | --            | --                     | --               | --                       | --                      | --          | --                  | --                  | --                  | --                | --             |
|                                      | 4/1/16       | <1.0                                     | <b>3.9</b>  | <b>4.7</b>   | <3.0          | --                     | --               | --                       | --                      | <0.1        | <0.1                | <0.1                | --                  | --                | --             |
| MW-5                                 | 10/8/15      | <1.0                                     | <b>2.7</b>  | <b>7.1</b>   | <3.0          | --                     | --               | --                       | --                      | <b>0.60</b> | <0.1                | <0.1                | --                  | --                | --             |
|                                      | 1/27/16      | <1.0                                     | <b>40.0</b> | <b>2.1</b>   | <b>11.0</b>   | --                     | --               | --                       | --                      | <0.1        | <0.1                | <0.1                | --                  | --                | --             |
|                                      | 4/1/16       | <1.0                                     | <b>45.0</b> | <b>2.3</b>   | <b>13.0</b>   | --                     | --               | --                       | --                      | <0.1        | <0.1                | <0.1                | --                  | --                | --             |
| MW-6                                 | 10/8/15      | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | <b>0.50</b> | <b>0.90</b>         | <b>0.80</b>         | --                  | --                | --             |
|                                      | 1/27/16      | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | <0.1        | <b>0.70</b>         | <b>1.20</b>         | --                  | --                | --             |
|                                      | 4/1/16       | <1.0                                     | <1.0        | <1.0         | <3.0          | --                     | --               | --                       | --                      | <0.1        | <0.1                | <0.1                | --                  | --                | --             |
| PQL                                  |              | 1  | 1 / 2       | 1            | 3             | 1                      | 1                | 1                        | 0.01                    | 0.1 / 5     | 0.1                 | 0.1                 | 1                   | 1                 | 0.2            |
| Ecology MTCA Method A Cleanup Levels |              | 5  | 1,000       | 700          | 1,000         | **                     | **               | 5                        | 0.01                    | 160         | 320                 | 34.48               | 5                   | 5                 | 0.2            |

Notes:  
ug/L = micrograms per liter  
-- Not analyzed for constituent  
< Not detected at the listed laboratory detection limits  
PQL = Practical Quantification Limit (laboratory detection limit)  
**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level  
**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels  
\* Not sampled; well was covered with soil and could not be located. Metal detector used to locate for next event.  
\*\* Method A Cleanup Level not established

## **APPENDIX A**

### **Site Photographs**





Photo #1: *Removing asphalt (uncovering AEG MW-3)*



Photo #2: *TP-1*



Photo #3: *TP-1 to west excavation*



Photo #4: *Trenching on the east side of utility trench*



Photo #5: *Mixing in ORC-Advanced to soil/groundwater*



Photo #6: *Mixing In ORC-Advanced to north*



## SITE PHOTOGRAPHIC RECORD

H & H Property  
Project Number: 15-112  
9/24/2015



Photo #7: After ORC-Adv. Mixed in east of stormwater pipe (green) note oil residue seeping from west of pipe creating sheen near pipe.



Photo #8: Resetting stormwater pipe grade



Photo #9: Mixing in ORC-Adv Pellets and RegenOx Part A and Part B.



Photo #10: Frothing of groundwater creating a brown color, many bubbles forming.



Photo #11: Sidewall distribution of ORC-Advanced and RegenOx products



Photo #12: Laying base of Permeable Membrane Filter PMF





Photo #13: *Mulch mix- Blended 40% by volume into bank run import fill material. Placed inside membrane.*



Photo #14: *First placement of Soil/Mulch Mix extended to approx. 7-8 in excavation next to pipe. Below water table in picture.*



Photo #15: *Mixing Regenesis chemicals in northern portion of excavation. 60% of total chemicals placed here due to previous analyticals being well above MTCA lean up levels.*



Photo #16: *Placing Soil/Mulch mix in north end of the excavation.*



Photo #17: *Filled to 2 feet below finish grade for structural fill placement.*



Photo #18: *Fully wrapped soil/mulch mix with geotextile fabric running north south for bridging affect, stability.*



|               |  |
|---------------|--|
| Photo<br>#19: | <i>Three sheets of geotextile fabric running north<br/>south</i> |
|---------------|--|



|               |                                 |
|---------------|---------------------------------|
| Photo<br>#20: | <i>Final subgrade elevation</i> |
|---------------|---------------------------------|

## **APPENDIX B**

### **Supporting Documents**

*Boring Logs*

*Laboratory Datasheets*



## LOG OF BOREHOLE

|   |   |   |                    |
|---|---|---|--------------------|
| <b>PROJECT:</b> <i>H and H Diesel</i>           | <b>JOB # 15-112</b>   | <b>Monitoring Well #</b> <i>Test Pit TP-1</i> | <b>PAGE 1 OF 1</b> |
| <b>Location:</b> <i>407 Porter Way</i>          | <b>Approximate Elevation:</b> <i>21 feet AMSL</i>                   |   |                    |
| <b>Subcontractor / Driller:</b> <i>ESN/ Don</i> | <b>Equipment / Drilling Method:</b> <i>Truck Mounted Push Probe</i> |   |                    |
| <b>Date:</b> <i>9.29.2015</i>                   | <b>Logged By:</b> <i>Shawn</i>                                      |   |                    |

| Boring Depth<br>(feet) | Soil Description   | Unified Soil<br>Symbol | Sample<br>Depth | Sample<br>Recovery | Sample<br>Number | Time | Blows/Foot | PID Reading | Sheen | Observations        |
|------------------------|--|------------------------|-----------------|--------------------|------------------|------|------------|-------------|-------|---------------------|
|                        | 2" of 5/8" minus crushed angular GRAVEL Roadsurfacing material<br>Brown, moist, medium dense, gravelly SAND with silt (FILL) |                        | 1               |                    | TP-1 1'          | 9:10 |            | 75          |       | Slight Petrol odors |
|                        |  |                        | 2               |                    |                  |      |            |             |       |                     |
|                        |  |                        | 3               |                    |                  |      |            |             |       |                     |
|                        |  |                        | 4               |                    | TP-1 4'          |      |            | 659         |       | Petrol Odors        |
| 5                      | @ 4.5' Wood debris, cut timber butts, wood chips and logs  |                        | 5               |                    |                  |      |            |             |       |                     |
|                        |  |                        | 6               |                    |                  |      |            |             |       |                     |
|                        | Brown, moist, soft, PEAT, visible organic roots and plant debris   |                        | 7               |                    |                  |      |            |             |       | No odors            |
|                        |  |                        | 8               |                    |                  |      |            |             |       |                     |
|                        |  |                        | 9               |                    |                  |      |            |             |       |                     |
| 10                     | Total Depth 9 feet bgs, No water at time of excavation.  |                        | 10              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 11              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 12              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 13              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 14              |                    |                  |      |            |             |       |                     |
| 15                     |  |                        | 15              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 16              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 17              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 18              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 19              |                    |                  |      |            |             |       |                     |
| 20                     |  |                        | 20              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 21              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 22              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 23              |                    |                  |      |            |             |       |                     |
|                        |  |                        | 24              |                    |                  |      |            |             |       |                     |
| 25                     |  |                        | 25              |                    |                  |      |            |             |       |                     |

### Explanation



Sample Advance / Recovery



No Recovery

--- Contact located approximately



Groundwater level at time of drilling

AT

or date of measurement

### Monitoring Well Construction



Grout/Concrete



3/4-inch bentonite chips



Silica sand



2-inch diameter blank PVC casing from






2-inch diameter PVC 0.020" slotted screen

# LOG OF BOREHOLE






|   |   |   |                    |
|---|---|---|--------------------|
| <b>PROJECT:</b> <i>H and H Diesel</i>           | <b>JOB # 15-112</b>   | <b>Monitoring Well #</b> <i>B-11/MW-4</i> | <b>PAGE 1 OF 1</b> |
| <b>Location:</b> <i>407 Porter Way</i>          | <b>Approximate Elevation:</b> <i>21 feet AMSL</i>                   |   |                    |
| <b>Subcontractor / Driller:</b> <i>ESN/ Don</i> | <b>Equipment / Drilling Method:</b> <i>Truck Mounted Push Probe</i> |   |                    |
| <b>Date:</b> <i>9.29.2015</i>                   | <b>Logged By:</b> <i>Shawn</i>                                      |   |                    |

| Boring Depth (feet) | Soil Description   | Unified Soil Symbol | Sample Depth | Sample Recovery | Sample Number | Time | Blows/Foot | PID Reading | Sheen | Monitoring Well Construction |
|---------------------|--|---------------------|--------------|-----------------|---------------|------|------------|-------------|-------|------------------------------|
|                     | 2" of 5/8" minus crushed angular GRAVEL Roadsurfacing material   |                     | 1            |                 |               |      |            |             |       |                              |
|                     | Brown, moist, medium dense, gravelly SAND with silt (FILL)   |                     | 2            |                 |               |      |            |             |       |                              |
|                     |  |                     | 3            |                 |               |      |            |             |       |                              |
|                     |  |                     | 4            |                 |               |      |            |             |       |                              |
| 5                   |  |                     | 5            |                 | B-11/MW-4 5'  | 9:05 |            | 1           |       |                              |
|                     | @ 6' Wood debris, cut timber, wood chips   |                     | 6            |                 |               |      |            |             |       |                              |
|                     | Brown, moist, soft, PEAT, visible organic roots and plant debris   |                     | 7            |                 |               |      |            |             |       |                              |
|                     |  |                     | 8            |                 |               |      |            |             |       |                              |
|                     |  |                     | 9            |                 |               |      |            |             |       |                              |
| 10                  |  |                     | 10           |                 | B-11/MW-4 10' | 9:10 |            | 1.5         |       |                              |
|                     | @ 10' transitions to organic SILT, broken down organic material, Leaf impressions in silt, becomes light brown |                     | 11           |                 |               |      |            |             |       |                              |
|                     |  |                     | 12           |                 |               |      |            |             |       |                              |
|                     |  |                     | 13           |                 |               |      |            |             |       |                              |
|                     |  |                     | 14           |                 |               |      |            |             |       |                              |
| 15                  |  |                     | 15           |                 | B-11/MW-4 15' | 9:15 |            | 1           |       |                              |
|                     | Total Depth 15 feet bgs, 7' of water at time of drilling.  |                     | 16           |                 |               |      |            |             |       |                              |
|                     |  |                     | 17           |                 |               |      |            |             |       |                              |
|                     |  |                     | 18           |                 |               |      |            |             |       |                              |
|                     |  |                     | 19           |                 |               |      |            |             |       |                              |
| 20                  |  |                     | 20           |                 |               |      |            |             |       |                              |
|                     |  |                     | 21           |                 |               |      |            |             |       |                              |
|                     |  |                     | 22           |                 |               |      |            |             |       |                              |
|                     |  |                     | 23           |                 |               |      |            |             |       |                              |
|                     |  |                     | 24           |                 |               |      |            |             |       |                              |
| 25                  |  |                     | 25           |                 |               |      |            |             |       |                              |

## Explanation

-  Sample Advance / Recovery
-  No Recovery
- Contact located approximately
-  Groundwater level at time of drilling or date of measurement

## Monitoring Well Construction

-  Grout/Concrete
-  3/4-inch bentonite chips
-  Silica sand
-  2-inch diameter blank PVC casing from
-  2-inch diameter PVC 0.020 inch slotted screen

Ecology Tag # BIM187






## LOG OF BOREHOLE






|   |   |   |                    |
|---|---|---|--------------------|
| <b>PROJECT:</b> <i>H and H Diesel</i>           | <b>JOB # 15-112</b>   | <b>Monitoring Well #</b> <i>B-12/MW-5</i> | <b>PAGE 1 OF 1</b> |
| <b>Location:</b> <i>407 Porter Way</i>          | <b>Approximate Elevation:</b> <i>21 feet AMSL</i>                   |   |                    |
| <b>Subcontractor / Driller:</b> <i>ESN/ Don</i> | <b>Equipment / Drilling Method:</b> <i>Truck Mounted Push Probe</i> |   |                    |
| <b>Date:</b> <i>9.29.2015</i>                   | <b>Logged By:</b> <i>Shawn</i>                                      |   |                    |

| Boring Depth<br>(feet) | Soil Description   | Unified Soil<br>Symbol | Sample<br>Depth | Sample<br>Recovery | Sample<br>Number | Time  | Blows/Foot | PID Reading | Sheen | Monitoring<br>Well<br>Construction |
|------------------------|--|------------------------|-----------------|--------------------|------------------|-------|------------|-------------|-------|------------------------------------|
| 5                      | 2" of 5/8" minus crushed angular GRAVEL Roadsurfacing material<br>Brown, moist, medium dense, gravelly SAND with silt (FILL) |                        | 1               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 2               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 3               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 4               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 5               |                    | B-12/MW-5 5'     | 10:30 |            | 1           |       |                                    |
|                        | @ 6' Wood debris, cut timber, wood chips   |                        | 6               |                    |                  |       |            |             |       |                                    |
|                        | Brown, moist, soft, PEAT, visible organic roots and plant debris   |                        | 7               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 8               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 9               |                    |                  |       |            |             |       |                                    |
| 10                     |  |                        | 10              |                    | B-12/MW-5 10'    | 10:35 |            | 1           |       |                                    |
|                        | @ 11' transitions to organic SILT, broken down organic material,<br>Leaf impressions in silt, becomes light brown            |                        | 11              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 12              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 13              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 14              |                    |                  |       |            |             |       |                                    |
| 15                     |  |                        | 15              |                    | B-12/MW-5 15'    | 10:40 |            | 0           |       |                                    |
|                        | Total Depth 15 feet bgs, 4' of water at time of drilling.  |                        | 16              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 17              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 18              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 19              |                    |                  |       |            |             |       |                                    |
| 20                     |  |                        | 20              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 21              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 22              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 23              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 24              |                    |                  |       |            |             |       |                                    |
| 25                     |  |                        | 25              |                    |                  |       |            |             |       |                                    |

### Explanation

-  Sample Advance / Recovery
-  No Recovery
- Contact located approximately
-  Groundwater level at time of drilling  
or date of measurement

### Monitoring Well Construction

-  Grout/Concrete
-  3/4-inch bentonite chips
-  Silica sand
-  2-inch diameter blank PVC casing from
-  2-inch diameter PVC 0.020" slotted screen

Ecology Tag # BIM188








## LOG OF BOREHOLE






|   |   |   |                    |
|---|---|---|--------------------|
| <b>PROJECT:</b> <i>H and H Diesel</i>           | <b>JOB # 15-112</b>   | <b>Monitoring Well #</b> <i>B-13/MW-6</i> | <b>PAGE 1 OF 1</b> |
| <b>Location:</b> <i>407 Porter Way</i>          | <b>Approximate Elevation:</b> <i>21 feet AMSL</i>                   |   |                    |
| <b>Subcontractor / Driller:</b> <i>ESN/ Don</i> | <b>Equipment / Drilling Method:</b> <i>Truck Mounted Push Probe</i> |   |                    |
| <b>Date:</b> <i>9.29.2015</i>                   | <b>Logged By:</b> <i>Shawn</i>                                      |   |                    |

| Boring Depth<br>(feet) | Soil Description   | Unified Soil<br>Symbol | Sample<br>Depth | Sample<br>Recovery | Sample<br>Number | Time  | Blows/Foot | PID Reading | Sheen | Monitoring<br>Well<br>Construction |
|------------------------|--|------------------------|-----------------|--------------------|------------------|-------|------------|-------------|-------|------------------------------------|
|                        | 2" of 5/8" minus crushed angular GRAVEL Roadsurfacing material<br>Brown, moist, medium dense, gravelly SAND with silt (FILL) |                        | 1               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 2               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 3               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 4               |                    |                  |       |            |             |       |                                    |
| 5                      | @ 5' oily sheen on water, oil petrol smell   |                        | 5               |                    | B-13/MW-5 5'     | 12:15 |            | 4.5         |       |                                    |
|                        |  |                        | 6               |                    |                  |       |            |             |       |                                    |
|                        | Gray, moist, medium dense SAND, Fine to medium sand (utility trench)   |                        | 7               |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 8               |                    |                  |       |            |             |       |                                    |
|                        | Brown, moist, soft, PEAT, visible organic roots and plant debris   |                        | 9               |                    |                  |       |            |             |       |                                    |
| 10                     |  |                        | 10              |                    | B-13/MW-5 10'    | 12:30 |            | 1           |       |                                    |
|                        | Total Depth 10 feet bgs, 2' of water at time of development. 1/2 gallon / 3 minutes recharge rate at time of drilling.       |                        | 11              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 12              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 13              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 14              |                    |                  |       |            |             |       |                                    |
| 15                     |  |                        | 15              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 16              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 17              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 18              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 19              |                    |                  |       |            |             |       |                                    |
| 20                     |  |                        | 20              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 21              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 22              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 23              |                    |                  |       |            |             |       |                                    |
|                        |  |                        | 24              |                    |                  |       |            |             |       |                                    |
| 25                     |  |                        | 25              |                    |                  |       |            |             |       |                                    |

### Explanation

-  Sample Advance / Recovery
-  No Recovery
- Contact located approximately
-  Groundwater level at time of drilling  
AT or date of measurement

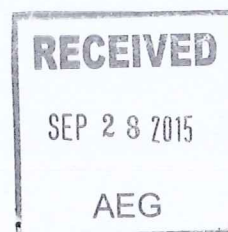
### Monitoring Well Construction

-  Grout/Concrete
-  3/4-inch bentonite chips
-  Silica sand
-  2-inch diameter blank PVC casing from
-  2-inch diameter PVC 0.020" slotted screen

Ecology Tag # BIM189

September 22, 2015

Shawn Lombardini  
Associated Environmental Group, Inc.  
605 11th Ave. SE, Suite 201  
Olympia, WA 98501



Dear Mr. Lombardini:

Please find enclosed the analytical data report for the H& H 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's by Method 8270, PCB's by Method 8081, MTCA 5 Metals by Method 6020, and Hexavalent Chromium by Method 7196A on September 1 - 14, 2015.

The results of the analyses are summarized in the attached table. 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,

A handwritten signature in cursive script that reads "Michael A. Korosec".

Michael A. Korosec  
*President*

## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H PROPERTY  
PROJECT #15-112  
Milton, Washington

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

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx Extended with Silica Gel Clean Up

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (mg/kg) | Lube Oil Range Organics (mg/kg) |
|------------------|---------------|---------------|------------------------|-------------------------------|---------------------------------|
| Method Blank     | 9/2/2015      | 9/2/2015      | 94                     | nd                            | nd                              |
| LCS              | 9/2/2015      | 9/2/2015      | 96                     | 125%                          | ---                             |
| TP1 1'           | 9/2/2015      | 9/2/2015      | 70                     | nd                            | 160                             |
| TP1 4'           | 9/2/2015      | 9/2/2015      | Int                    | 1200                          | 2600                            |
| HS1 3'           | 9/2/2015      | 9/2/2015      | 150                    | 900                           | 2500                            |
| HS2 3'           | 9/2/2015      | 9/2/2015      | 77                     | nd                            | 180                             |
| HS2 5'           | 9/2/2015      | 9/3/2015      | 80                     | nd                            | 130                             |
| HS3 5'           | 9/2/2015      | 9/3/2015      | 59                     | nd                            | 1700                            |
| HS4 3'           | 9/2/2015      | 9/2/2015      | 86                     | nd                            | 1200                            |
| HS4 3' Duplicate | 9/2/2015      | 9/3/2015      | 86                     | nd                            | 880                             |
| HS5 3'           | 9/2/2015      | 9/3/2015      | 77                     | nd                            | 100                             |
| HS6 3'           | 9/2/2015      | 9/2/2015      | 72                     | nd                            | 120                             |
| Reporting 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

Associated Environmental Group  
PROJECT H&H PROPERTY  
PROJECT #15-112  
Milton, Washington

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

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

| Sample Number    | Date Prepared | Date Analyzed | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | Gasoline Range Organics (mg/kg) | Surrogate Recovery (%) |
|------------------|---------------|---------------|-----------------|-----------------|----------------------|-----------------|---------------------------------|------------------------|
| Method Blank     | 9/1/2015      | 9/1/2015      | nd              | nd              | nd                   | nd              | nd                              | 109                    |
| LCS              | 9/1/2015      | 9/1/2015      | 97%             | 95%             | 92%                  | 91%             | 104%                            | 100                    |
| LCSD             | 9/1/2015      | 9/1/2015      | 97%             | 95%             | 90%                  | 89%             | ---                             | 99                     |
| TP1 1'           | 8/26/2015     | 9/1/2015      | nd              | nd              | nd                   | 0.15            | 210                             | 107                    |
| TP1 4'           | 8/26/2015     | 9/2/2015      | nd              | 1.1             | 0.47                 | 18              | 8800                            | 104                    |
| HS1 3'           | 8/26/2015     | 9/2/2015      | 0.035           | 1.7             | 11                   | 55              | 40,000                          | 96                     |
| HS1 3' Duplicate | 8/26/2015     | 9/2/2015      | 0.024           | 1.4             | 12                   | 57              | 34,000                          | 96                     |
| HS2 3'           | 8/26/2015     | 9/2/2015      | nd              | nd              | nd                   | nd              | 110                             | 105                    |
| HS2 5'           | 8/26/2015     | 9/2/2015      | nd              | nd              | nd                   | nd              | 92                              | 108                    |
| HS3 5'           | 8/26/2015     | 9/2/2015      | nd              | 0.15            | 0.24                 | 1.0             | 130                             | 107                    |
| HS4 3'           | 8/26/2015     | 9/2/2015      | nd              | nd              | nd                   | nd              | 47                              | 105                    |
| HS5 3'           | 8/26/2015     | 9/2/2015      | nd              | nd              | nd                   | nd              | 21                              | 107                    |
| HS6 3'           | 8/26/2015     | 9/2/2015      | nd              | nd              | nd                   | nd              | 27                              | 106                    |
| Reporting Limits |               |               | 0.02            | 0.05            | 0.05                 | 0.15            | 10                              |                        |

"---" Indicates not tested for component.

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

"int" Indicates that interference prevents determination.

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

# ESN NORTHWEST CHEMISTRY LABORATORY

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PROJECT #15-112  
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lab@esnsw.com

## Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

|                             | RL      | MB       | LCS      | LCSD     | HS1 3'   | HS2 5'   |
|-----------------------------|---------|----------|----------|----------|----------|----------|
| Date extracted              |         | 09/02/15 | 09/02/15 | 09/02/15 | 08/26/15 | 08/26/15 |
| Date analyzed               | (mg/Kg) | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 |
| % Moisture                  |         |          |          |          | 13%      | 17%      |
| Dichlorodifluoromethane     | 0.05    | nd       |          |          | nd       | nd       |
| Chloromethane               | 0.05    | nd       |          |          | nd       | nd       |
| Vinyl chloride              | 0.02    | nd       | 92%      | 89%      | nd       | nd       |
| Bromomethane                | 0.05    | nd       |          |          | nd       | nd       |
| Chloroethane                | 0.05    | nd       |          |          | nd       | nd       |
| Trichlorofluoromethane      | 0.05    | nd       |          |          | nd       | nd       |
| Acetone                     | 0.25    | nd       |          |          | nd       | nd       |
| 1,1-Dichloroethene          | 0.05    | nd       | 98%      | 97%      | nd       | nd       |
| Methylene chloride          | 0.05    | nd       |          |          | nd       | nd       |
| Methyl-t-butyl ether (MTBE) | 0.05    | nd       |          |          | nd       | nd       |
| trans-1,2-Dichloroethene    | 0.05    | nd       |          |          | nd       | nd       |
| 1,1-Dichloroethane          | 0.05    | nd       |          |          | nd       | nd       |
| 2-Butanone (MEK)            | 0.25    | nd       |          |          | nd       | nd       |
| cis-1,2-Dichloroethene      | 0.05    | nd       |          |          | nd       | nd       |
| 2,2-Dichloropropane         | 0.05    | nd       |          |          | nd       | nd       |
| Chloroform                  | 0.05    | nd       | 116%     | 113%     | nd       | nd       |
| Bromochloromethane          | 0.05    | nd       |          |          | nd       | nd       |
| 1,1,1-Trichloroethane       | 0.05    | nd       |          |          | nd       | nd       |
| 1,2-Dichloroethane (EDC)    | 0.05    | nd       |          |          | nd       | nd       |
| 1,1-Dichloropropene         | 0.05    | nd       |          |          | nd       | nd       |
| Carbon tetrachloride        | 0.05    | nd       |          |          | nd       | nd       |
| Benzene                     | 0.02    | nd       | 112%     | 109%     | 0.035    | nd       |
| Trichloroethene (TCE)       | 0.02    | nd       | 119%     | 111%     | nd       | nd       |
| 1,2-Dichloropropane         | 0.05    | nd       | 133%     | 130%     | nd       | nd       |
| Dibromomethane              | 0.05    | nd       |          |          | nd       | nd       |
| Bromodichloromethane        | 0.05    | nd       |          |          | nd       | nd       |
| 4-Methyl-2-pentanone (MIBK) | 0.25    | nd       |          |          | nd       | nd       |
| cis-1,3-Dichloropropene     | 0.05    | nd       |          |          | nd       | nd       |
| Toluene                     | 0.05    | nd       | 104%     | 98%      | 1.7      | nd       |
| trans-1,3-Dichloropropene   | 0.05    | nd       |          |          | nd       | nd       |
| 1,1,2-Trichloroethane       | 0.05    | nd       |          |          | nd       | nd       |
| 2-Hexanone                  | 0.25    | nd       |          |          | nd       | nd       |
| 1,3-Dichloropropane         | 0.05    | nd       |          |          | nd       | nd       |
| Dibromochloromethane        | 0.05    | nd       |          |          | nd       | nd       |
| Tetrachloroethene (PCE)     | 0.02    | nd       | 98%      | 87%      | nd       | nd       |
| 1,2-Dibromoethane (EDB)     | 0.05    | nd       |          |          | nd       | nd       |
| Chlorobenzene               | 0.05    | nd       | 103%     | 96%      | nd       | nd       |
| 1,1,1,2-Tetrachloroethane   | 0.05    | nd       |          |          | nd       | nd       |
| Ethylbenzene                | 0.05    | nd       | 101%     | 92%      | 11       | nd       |
| Xylenes                     | 0.15    | nd       | 103%     | 91%      | 55       | nd       |
| Styrene                     | 0.05    | nd       |          |          | nd       | nd       |
| Bromoform                   | 0.05    | nd       |          |          | nd       | nd       |
| 1,1,2,2-Tetrachloroethane   | 0.05    | nd       |          |          | nd       | nd       |
| Isopropylbenzene            | 0.05    | nd       |          |          | 11       | nd       |
| 1,2,3-Trichloropropane      | 0.05    | nd       |          |          | nd       | nd       |
| Bromobenzene                | 0.05    | nd       |          |          | nd       | nd       |

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lab@esnnw.com

## Analysis of Volatile Organic Compounds in Soil by Method 8260C/5035

|                             | RL      | MB       | LCS      | LCSD     | HS1 3'   | HS2 5'   |
|-----------------------------|---------|----------|----------|----------|----------|----------|
| Date extracted              |         | 09/02/15 | 09/02/15 | 09/02/15 | 08/26/15 | 08/26/15 |
| Date analyzed               | (mg/Kg) | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 |
| % Moisture                  |         |          |          |          | 13%      | 17%      |
| n-Propylbenzene             | 0.05    | nd       |          |          | 35       | nd       |
| 2-Chlorotoluene             | 0.05    | nd       |          |          | nd       | nd       |
| 4-Chlorotoluene             | 0.05    | nd       |          |          | nd       | nd       |
| 1,3,5-Trimethylbenzene      | 0.05    | nd       |          |          | 89       | 0.074    |
| tert-Butylbenzene           | 0.05    | nd       |          |          | nd       | nd       |
| 1,2,4-Trimethylbenzene      | 0.05    | nd       |          |          | 180      | 0.19     |
| sec-Butylbenzene            | 0.05    | nd       |          |          | 55       | nd       |
| 1,3-Dichlorobenzene         | 0.05    | nd       |          |          | nd       | nd       |
| 1,4-Dichlorobenzene         | 0.05    | nd       |          |          | nd       | nd       |
| Isopropyltoluene            | 0.05    | nd       |          |          | nd       | 0.066    |
| 1,2-Dichlorobenzene         | 0.05    | nd       |          |          | nd       | nd       |
| n-Butylbenzene              | 0.05    | nd       |          |          | nd       | nd       |
| 1,2-Dibromo-3-Chloropropane | 0.05    | nd       |          |          | nd       | nd       |
| 1,2,4-Trichlorobenzene      | 0.05    | nd       |          |          | nd       | nd       |
| Naphthalene                 | 0.05    | nd       |          |          | 5.4      | nd       |
| Hexachloro-1,3-butadiene    | 0.05    | nd       |          |          | nd       | nd       |
| 1,2,3-Trichlorobenzene      | 0.05    | nd       |          |          | nd       | nd       |
| Surrogate recoveries        |         |          |          |          |          |          |
| Dibromofluoromethane        |         | 97%      | 96%      | 98%      | 100%     | 100%     |
| Toluene-d8                  |         | 100%     | 94%      | 93%      | 111%     | 98%      |
| 4-Bromofluorobenzene        |         | 106%     | 95%      | 93%      | 96%      | 108%     |

### 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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**Analysis of Polynuclear Aromatic Hydrocarbons in Soil by Method 8270****Analytical Results**

|                         | <b>RL</b> | <b>MB</b> | <b>LCS</b> | <b>HS1 3'</b> | <b>HS2 5'</b> |
|-------------------------|-----------|-----------|------------|---------------|---------------|
| Date extracted          |           | 09/01/15  | 09/01/15   | 09/01/15      | 09/01/15      |
| Date analyzed           |           | 09/01/15  | 09/01/15   | 09/01/15      | 09/01/15      |
| Moisture, %             | (mg/kg)   |           |            | 13%           | 17%           |
| Naphthalene             | 0.02      | nd        | 98%        | <b>9.2</b>    | nd            |
| 2-Methylnaphthalene     | 0.02      | nd        | 106%       | <b>15</b>     | <b>0.11</b>   |
| 1-Methylnaphthalene     | 0.02      | nd        | --         | <b>12</b>     | <b>0.11</b>   |
| Acenaphthylene          | 0.02      | nd        | 113%       | <b>0.09</b>   | nd            |
| Acenaphthene            | 0.02      | nd        | 90%        | nd            | nd            |
| Fluorene                | 0.02      | nd        | 95%        | <b>1.6</b>    | nd            |
| Phenanthrene            | 0.02      | nd        | 64%        | <b>2.5</b>    | nd            |
| Anthracene              | 0.02      | nd        | 115%       | nd            | nd            |
| Fluoranthene            | 0.02      | nd        | 93%        | nd            | nd            |
| Pyrene                  | 0.02      | nd        | 108%       | nd            | nd            |
| Benzo(a)anthracene*     | 0.02      | nd        | 137%       | nd            | nd            |
| Chrysene*               | 0.02      | nd        | 116%       | nd            | nd            |
| Benzo(b)fluoranthene*   | 0.02      | nd        | 124%       | nd            | nd            |
| Benzo(k)fluoranthene*   | 0.02      | nd        | 131%       | nd            | nd            |
| Benzo(a)pyrene*         | 0.02      | nd        | 87%        | nd            | nd            |
| Indeno(1,2,3-cd)pyrene* | 0.02      | nd        | 92%        | nd            | nd            |
| Dibenzo(a,h)anthracene* | 0.02      | nd        | 75%        | nd            | nd            |
| Benzo(ghi)perylene      | 0.02      | nd        | 85%        | nd            | nd            |

Total Carcinogens nd nd

**Surrogate recoveries:**

|                  |      |      |      |      |
|------------------|------|------|------|------|
| 2-Fluorobiphenyl | 84%  | 110% | 89%  | 112% |
| p-Terphenyl-d14  | 114% | 101% | 100% | 110% |

**Data Qualifiers and Analytical Comments**

\* - Carcinogenic Analyte

nd - not detected at listed reporting limits

ns - not spiked

Results reported on dry-weight basis

Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%

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## Total Metals in Soil by EPA-6020 Series

| Sample Number    | Date Analyzed | Lead (Pb)<br>(mg/kg) | Cadmium (Cd)<br>(mg/kg) | Chromium (Cr)<br>(mg/kg) | Arsenic (As)<br>(mg/kg) | Mercury (Hg)<br>(mg/kg) |
|------------------|---------------|----------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| Method Blank     | 9/1/2015      | nd                   | nd                      | nd                       | nd                      | nd                      |
| HS1 3'           | 9/1/2015      | nd                   | nd                      | 23                       | nd                      | nd                      |
| HS2 5'           | 9/1/2015      | 7.3                  | nd                      | 21                       | 7.0                     | nd                      |
| HS2 5' Duplicate | 9/1/2015      | nd                   | nd                      | 27                       | nd                      | nd                      |
| Reporting Limits |               | 5.0                  | 1.0                     | 5.0                      | 5.0                     | 0.5                     |

## QA/QC Data - Total Metals EPA-6020

| Sample Number: HS2-5' |                            |                              |                          |                            |                              |                          |      |
|-----------------------|----------------------------|------------------------------|--------------------------|----------------------------|------------------------------|--------------------------|------|
|                       | Matrix Spike               |                              |                          | Matrix Spike Duplicate     |                              |                          | RPD  |
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |      |
| Lead                  | 74.9                       | 82.9                         | 111                      | 92.3                       | 79.4                         | 86.0                     | 25.1 |
| Cadmium               | 74.9                       | 85.1                         | 114                      | 92.3                       | 81.5                         | 88.3                     | 25.1 |
| Chromium              | 74.9                       | 97.1                         | 130M                     | 92.3                       | 87.5                         | 94.8                     | 31.0 |
| Arsenic               | 74.9                       | 79.3                         | 106                      | 92.3                       | 75.2                         | 81.5                     | 26.0 |
| Mercury               | 7.49                       | 9.03                         | 121M                     | 9.23                       | 8.82                         | 95.6                     | 23.1 |

| Laboratory Control Sample |                            |                              |                          |
|---------------------------|----------------------------|------------------------------|--------------------------|
|                           | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |
| Lead                      | 100                        | 87.9                         | 87.9                     |
| Cadmium                   | 100                        | 88.4                         | 88.4                     |
| Chromium                  | 100                        | 84.1                         | 84.1                     |
| Arsenic                   | 100                        | 83.5                         | 83.5                     |
| Mercury                   | 10.0                       | 9.36                         | 93.6                     |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 80%-120%

ACCEPTABLE RPD IS 35%

M - Matrix Spike recovery failed due to matrix interference.





# SPECTRA Laboratories

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09/14/2015

ESN Northwest  
1210 Eastside St. S.E.  
Suite 200  
Olympia, WA 98501  
Attn: Julie Woods


Project: H & H  
Client ID: HS1-3  
Sample Matrix: Solid  
Date Sampled: 08/26/2015  
Date Received: 09/01/2015  
Spectra Project: 2015090001  
Spectra Number: 1

| <u>Analyte</u>      | <u>Result</u> | <u>Units</u> | <u>Method</u> |
|---------------------|---------------|--------------|---------------|
| Hexavalent Chromium | <0.1          | mg/Kg        | SW846 7196A   |
| PCB AR1254          | 0.02*         | mg/Kg        | SW846 8082A   |

\*Sample contains multiple Aroclors. Total area of the PCB pattern in the sample was quantified on the basis of the Aroclor standard that is most similar to the sample.

| <u>Surrogate</u>   | <u>Recovery</u> | <u>Method</u> |
|--------------------|-----------------|---------------|
| Decachlorobiphenyl | 58              | SW846 8082A   |

SPECTRA LABORATORIES

  
Steve Hibbs, Laboratory Manager

a6/bw



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09/14/2015

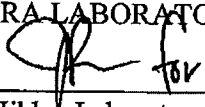
ESN Northwest  
1210 Eastside St. S.E.  
Suite 200  
Olympia, WA 98501  
Attn: Julie Woods

Project: H & H  
Client ID: HS2-5  
Sample Matrix: Solid  
Date Sampled: 08/26/2015  
Date Received: 09/01/2015  
Spectra Project: 2015090001  
Spectra Number: 2

| <u>Analyte</u>      | <u>Result</u> | <u>Units</u> | <u>Method</u> |
|---------------------|---------------|--------------|---------------|
| Hexavalent Chromium | <0.1          | mg/Kg        | SW846 7196A   |
| PCB                 | <0.01         | mg/Kg        | SW846 8082A   |

| <u>Surrogate</u>   | <u>Recovery</u> | <u>Method</u> |
|--------------------|-----------------|---------------|
| Decachlorobiphenyl | 71              | SW846 8082A   |

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Steve Hibbs, Laboratory Manager

a6/bw



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September 14, 2015

ESN Northwest  
1210 Eastside St. S.E.  
Suite 200  
Olympia, WA 98501

Method: EPA Method 8082A  
Sample Matrix: Solid  
Units: mg/Kg  
Spectra Project: 2015090001  
Applies to Spectra # 1

## PCB ANALYSIS QUALITY CONTROL RESULTS

| MS/MSD          |                      |                           |                           |                         |                                |                         |            |
|-----------------|----------------------|---------------------------|---------------------------|-------------------------|--------------------------------|-------------------------|------------|
| Spiked Sample:  |                      | 070715-2                  |                           | Date Extracted:         |                                | 8/12/2015               |            |
|                 |                      |                           |                           | Date Analyzed:          |                                | 8/13/2015               |            |
| <u>Compound</u> | <u>Sample Result</u> | <u>Spike Amount Added</u> | <u>Spike Amount Found</u> | <u>Percent Recovery</u> | <u>Dup. Spike Amount Found</u> | <u>Percent Recovery</u> | <u>RPD</u> |
| AR1260          | <0.01                | 0.025                     | 0.019                     | 76%                     | 0.021                          | 84%                     | 10.0       |

## METHOD BLANK

Date Extracted: 9/1/2015      Date Analyzed: 9/4/2015

PCB's <0.01

Surrogate Recovery:

Decachlorobiphenyl 86%

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Steven G. Hibbs, Laboratory Manager



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September 4, 2015

ESN Northwest  
1210 Eastside St. SE, Suite 200  
Olympia, WA 98501

Units: mg/Kg  
Spectra Project: 2015090001  
Applies to Spectra #'s 1-2

## QUALITY CONTROL RESULTS

### Hexavalent Chromium in Soil/Solid - Method SM 3500 Cr-D/ SW846 7196A

#### Method Blank

|                     |          |                |          |
|---------------------|----------|----------------|----------|
| Date Extracted:     | 9/2/2015 | Date Analyzed: | 9/4/2015 |
| Hexavalent Chromium |          | Method Blank   | < 0.1    |

#### Blank Spike (LCS)

|                     |             |                |          |
|---------------------|-------------|----------------|----------|
| Date Extracted:     | 9/2/2015    | Date Analyzed: | 9/4/2015 |
| Hexavalent Chromium | Spike Added | LCS Conc.      | LCS %Rec |
|                     | 0.1         | 0.087          | 87.0     |

LCS Recovery limits 75-120%

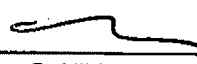
#### Matrix Spike/Matrix Spike Duplicate (MS/MSD)

|                     |              |                |          |         |           |          |      |
|---------------------|--------------|----------------|----------|---------|-----------|----------|------|
| Date Extracted:     | 9/2/2015     | Date Analyzed: | 9/4/2015 |         |           |          |      |
| Sample Spiked:      | 2015090001-2 |                |          |         |           |          |      |
| Hexavalent Chromium | Sample Conc. | Spike Conc.    | MS Conc. | MS %Rec | MSD Conc. | MSD %Rec | RPD  |
|                     | 0.000        | 0.10           | 0.105    | 105.0   | 0.094     | 94.0     | 11.1 |

Recovery Limits 75-125%

RPD Limit 20

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Steven G. Hibbs  
Laboratory Manager

# CHAIN-OF-CUSTODY RECORD


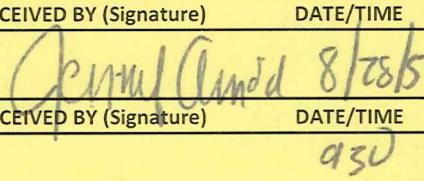
CLIENT: AEG DATE: 8.26.15 PAGE 1 OF 2

ADDRESS: 605 11th AVE PROJECT NAME: H+H

PHONE: 360 352 9835 FAX: \_\_\_\_\_ LOCATION: MELTON, WA

CLIENT PROJECT #: 15-112 PROJECT MANAGER: SHAWN COLLECTOR: SHAWN DATE OF COLLECTION: 8.26.15

| Sample Number | Depth | Time | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | NOTES | Total Number of Containers | Laboratory | Note Number        |               |                              |  |  |
|---------------|-------|------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|-----------|----------|-------|----------------------------|------------|--------------------|---------------|------------------------------|--|--|
|               |       |      |             |                | TPH - HClD | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite | WO Suite |       |                            |            |                    | TPH 9x + BTEX | PAH + PCB + CHROMIUM SPECIES |  |  |
| 1. TP1 1'     | 1'    | 910  | SPIL        | 2VOA+146       | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | X     |                            |            | SILICA GEL CLEANUP |               |                              |  |  |
| 2. TP1 4'     | 4'    | 940  | ↓           | 2VOA+246       | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | X     | X                          |            | ON DIESEL SAMPLES  |               |                              |  |  |
| 3. HS1 3'     | 3'    | 1145 | ↓           | ↓              | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | X     | X                          |            |                    |               |                              |  |  |
| 4. HS2 3'     | 3'    | 1450 | ↓           | ↓              | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | X     | X                          |            |                    |               |                              |  |  |
| 5. HS2 5'     | 5'    | 1500 | ↓           | ↓              | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          | X     | X                          |            |                    |               |                              |  |  |
| 6.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 7.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 8.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 9.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 10.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 11.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 12.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 13.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 14.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 15.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 16.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 17.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |
| 18.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |       |                            |            |                    |               |                              |  |  |

|  |             |  |           |                               |  |  |
|--|-------------|--|-----------|-------------------------------|--|--|
| RELINQUISHED BY (Signature)  | DATE/TIME   | RECEIVED BY (Signature)  | DATE/TIME | SAMPLE RECEIPT                |  | LABORATORY NOTES:<br><br><u>HOLD UNTIL REVIEWED</u><br><br>Turn Around Time: 24 HR 48 HR 5 DAY |
|  | 8.28.15 930 |  | 8/28/15   | TOTAL NUMBER OF CONTAINERS    |  |  |
|  |             |  |           | CHAIN OF CUSTODY SEALS Y/N/NA |  |  |
|  |             |  |           | SEALS INTACT? Y/N/NA          |  |  |
| RELINQUISHED BY (Signature)  | DATE/TIME   | RECEIVED BY (Signature)  | DATE/TIME | RECEIVED GOOD COND./COLD      |  |  |
|  |             |  | 930       | NOTES:                        |  |  |



# CHAIN-OF-CUSTODY RECORD

CLIENT: KRG DATE: 8.27.15 PAGE 2 OF 2  
 ADDRESS: 605 11th AVE PROJECT NAME: H+H PROP.  
 PHONE: 360 352 9835 FAX: \_\_\_\_\_ LOCATION: H+H 407 WHEEL PORTAGE WY  
 CLIENT PROJECT #: 15-112 PROJECT MANAGER: SHOWN COLLECTOR: SHOWN DATE OF COLLECTION: \_\_\_\_\_

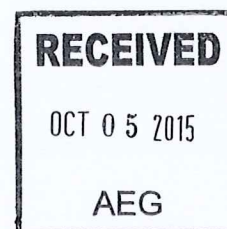
| Sample Number | Depth | Time | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           | NOTES    | Total Number of Containers | Laboratory | Note Number |
|---------------|-------|------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|-----------|----------|----------------------------|------------|-------------|
|               |       |      |             |                | TPH - HCID | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite | WO Suite |                            |            |             |
| 1. HS 3 5'    | 5'    | 1000 | SOL         |                | X          |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 2. HS 4 3'    | 3'    | 1200 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 3. HS 5 3'    | 3'    | 1230 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 4. HS 6 3'    | 3'    | 1300 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 5.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 6.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 7.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 8.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 9.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 10.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 11.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 12.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 13.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 14.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 15.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 16.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 17.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |
| 18.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |            |             |

|                             |             |                         |           |                               |  |                                      |
|-----------------------------|-------------|-------------------------|-----------|-------------------------------|--|--------------------------------------|
| RELINQUISHED BY (Signature) | DATE/TIME   | RECEIVED BY (Signature) | DATE/TIME | SAMPLE RECEIPT                |  | LABORATORY NOTES:<br><br><u>Hard</u> |
|                             | 8-28-15 930 |                         | 8-28-15   | TOTAL NUMBER OF CONTAINERS    |  |                                      |
| RELINQUISHED BY (Signature) | DATE/TIME   | RECEIVED BY (Signature) | DATE/TIME | CHAIN OF CUSTODY SEALS Y/N/NA |  |                                      |
|                             |             |                         |           | SEALS INTACT? Y/N/NA          |  |                                      |
|                             |             |                         |           | RECEIVED GOOD COND./COLD      |  | Turn Around Time: 24 HR 48 HR 5 DAY  |
|                             |             |                         |           | NOTES:                        |  |                                      |



September 29, 2015

Shawn Lombardini  
Associated Environmental Group, Inc.  
605 11th Ave. SE, Suite 201  
Olympia, WA 98501



Dear Mr. Lombardini:

Please find enclosed the analytical data report for the H & H Property Project in Milton, Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended with Silica Gel Cleanup, Gasoline by NWTPH-Gx, BTEX by Method 8260, and MTCA 5 Metals by Method 6020 on September 10 - 17, 2015.

The results of the analyses are summarized in the attached table. 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,

A handwritten signature in cursive script that reads "Michael A. Korosec".

Michael A. Korosec  
*President*

## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H PROPERTY  
PROJECT #15-112  
Milton, Washington

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

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx Extended with Silica Gel Clean Up

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (mg/kg) | Lube Oil Range Organics (mg/kg) |
|------------------|---------------|---------------|------------------------|-------------------------------|---------------------------------|
| Method Blank     | 9/10/2015     | 9/10/2015     | 97                     | nd                            | nd                              |
| LCS              | 9/10/2015     | 9/10/2015     | 136                    | 114%                          | ---                             |
| HS6 5'           | 9/10/2015     | 9/10/2015     | 64                     | nd                            | <b>310</b>                      |
| HS7 4'           | 9/10/2015     | 9/10/2015     | 69                     | nd                            | <b>230</b>                      |
| Reporting 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%



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

| Sample Number    | Date Prepared | Date Analyzed | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | Gasoline Range Organics (mg/kg) | Surrogate Recovery (%) |
|------------------|---------------|---------------|-----------------|-----------------|----------------------|-----------------|---------------------------------|------------------------|
| Method Blank     | 9/16/2015     | 9/16/2015     | nd              | nd              | nd                   | nd              | nd                              | 106                    |
| LCS              | 9/16/2015     | 9/16/2015     | 113%            | 107%            | 103%                 | 97%             | 103%                            | 98                     |
| LCSD             | 9/16/2015     | 9/16/2015     | 114%            | 104%            | 97%                  | 94%             | ---                             | 94                     |
| HS6 5'           | 9/10/2015     | 9/16/2015     | nd              | <b>0.051</b>    | nd                   | nd              | <b>13</b>                       | 101                    |
| HS7 4'           | 9/10/2015     | 9/16/2015     | nd              | <b>0.087</b>    | <b>0.052</b>         | nd              | <b>20</b>                       | 103                    |
| Reporting Limits |               |               | 0.02            | 0.05            | 0.05                 | 0.15            | 10                              |                        |

"---" Indicates not tested for component.

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

"int" Indicates that interference prevents determination.

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

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PROJECT H&H PROPERTY  
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**Total Metals in Soil by EPA-6020 Series**

| Sample Number    | Date Analyzed | Lead (Pb)<br>(mg/kg) | Cadmium (Cd)<br>(mg/kg) | Chromium (Cr)<br>(mg/kg) | Arsenic (As)<br>(mg/kg) | Mercury (Hg)<br>(mg/kg) |
|------------------|---------------|----------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| Method Blank     | 9/16/2015     | nd                   | nd                      | nd                       | nd                      | nd                      |
| HS6 5'           | 9/16/2015     | 45                   | nd                      | 16                       | 7.0                     | nd                      |
| HS6 5' Duplicate | 9/16/2015     | 32                   | nd                      | 12                       | 5.3                     | nd                      |
| HS7 4'           | 9/16/2015     | 76                   | nd                      | 27                       | 7.4                     | nd                      |
| Reporting Limits |               | 5.0                  | 1.0                     | 5.0                      | 5.0                     | 0.5                     |

**QA/QC Data - Total Metals EPA-6020**

| Sample Number: HS6-5' |              |                |                |                        |                |                |     |
|-----------------------|--------------|----------------|----------------|------------------------|----------------|----------------|-----|
|                       | Matrix Spike |                |                | Matrix Spike Duplicate |                |                | RPD |
|                       | Spiked Conc. | Measured Conc. | Spike Recovery | Spiked Conc.           | Measured Conc. | Spike Recovery |     |
|                       | (mg/kg)      | (mg/kg)        | (%)            | (mg/kg)                | (mg/kg)        | (%)            | (%) |
| Lead                  | 79.1         | 80.7           | 102            | 94.3                   | 90.5           | 96             | 6.1 |
| Cadmium               | 79.1         | 76.0           | 96             | 94.3                   | 91.5           | 97             | 1.0 |
| Chromium              | 79.1         | 78.6           | 99             | 94.3                   | 98.3           | 104            | 4.8 |
| Arsenic               | 79.1         | 85.6           | 108            | 94.3                   | 106            | 112            | 3.8 |
| Mercury               | 7.91         | 9.5            | 120            | 9.43                   | 11.8           | 125M           | 4.3 |

| Laboratory Control Sample |              |                |                |
|---------------------------|--------------|----------------|----------------|
|                           | Spiked Conc. | Measured Conc. | Spike Recovery |
|                           | (mg/kg)      | (mg/kg)        | (%)            |
| Lead                      | 100          | 101            | 101            |
| Cadmium                   | 100          | 100            | 100            |
| Chromium                  | 100          | 103            | 103            |
| Arsenic                   | 100          | 105            | 105            |
| Mercury                   | 10.0         | 11.9           | 119            |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 80%-120%

ACCEPTABLE RPD IS 35%

M - Matrix Spike recovery failed due to matrix interference.

## ESN NORTHWEST CHEMISTRY LABORATORY

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PROJECT H&H  
Milton, Washington

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(360) 459-4670 (360) 459-3432 Fax  
lab@esnnw.com

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil with Silica Gel Clean-Up by Method NWTPH-Dx Extended

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (mg/kg) | Lube Oil Range Organics (mg/kg) |
|------------------|---------------|---------------|------------------------|-------------------------------|---------------------------------|
| Method Blank     | 9/14/2015     | 9/14/2015     | 133                    | nd                            | nd                              |
| LCS              | 9/14/2015     | 9/14/2015     | 74                     | 110%                          | ---                             |
| HS 8 SP          | 9/14/2015     | 9/14/2015     | 81                     | 77                            | 400                             |
| HS 9 SP          | 9/14/2015     | 9/14/2015     | 74                     | 120                           | 390                             |
| HS 10 SP         | 9/14/2015     | 9/14/2015     | 86                     | nd                            | 270                             |
| Reporting 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%

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lab@esnnw.com

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

| Sample Number      | Date Prepared | Date Analyzed | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | Gasoline Range Organics (mg/kg) | Surrogate Recovery (%) |
|--------------------|---------------|---------------|-----------------|-----------------|----------------------|-----------------|---------------------------------|------------------------|
| Method Blank       | 9/17/2015     | 9/17/2015     | nd              | nd              | nd                   | nd              | nd                              | 103                    |
| LCS                | 9/17/2015     | 9/17/2015     | 81%             | 97%             | 98%                  | 99%             | 93%                             | 106                    |
| LCSD               | 9/17/2015     | 9/17/2015     | 76%             | 91%             | 94%                  | 90%             | ---                             | 100                    |
| HS 8 SP            | 9/11/2015     | 9/17/2015     | nd              | nd              | nd                   | nd              | 230                             | 99                     |
| HS 9 SP            | 9/11/2015     | 9/17/2015     | nd              | nd              | nd                   | nd              | 280                             | 98                     |
| HS 10 SP           | 9/11/2015     | 9/17/2015     | nd              | nd              | nd                   | nd              | 23                              | 106                    |
| HS 10 SP Duplicate | 9/11/2015     | 9/17/2015     | nd              | nd              | nd                   | nd              | 28                              | 100                    |
| Reporting Limits   |               |               | 0.02            | 0.05            | 0.05                 | 0.15            | 10                              |                        |

"---" Indicates not tested for component.

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

"int" Indicates that interference prevents determination.

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



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### Total Metals in Soil by EPA-6020 Series

| Sample Number     | Date Analyzed | Lead (Pb)<br>(mg/kg) | Cadmium (Cd)<br>(mg/kg) | Chromium (Cr)<br>(mg/kg) | Arsenic (As)<br>(mg/kg) | Mercury (Hg)<br>(mg/kg) |
|-------------------|---------------|----------------------|-------------------------|--------------------------|-------------------------|-------------------------|
| Method Blank      | 9/16/2015     | nd                   | nd                      | nd                       | nd                      | nd                      |
| HS 8 SP           | 9/16/2015     | 34                   | nd                      | 50                       | 6.0                     | nd                      |
| HS 8 SP Duplicate | 9/16/2015     | 44                   | nd                      | 52                       | 8.1                     | nd                      |
| HS 9 SP           | 9/16/2015     | 25                   | nd                      | 41                       | 5.0                     | nd                      |
| HS 10 SP          | 9/16/2015     | 59                   | nd                      | 36                       | 8.4                     | nd                      |
| Reporting Limits  |               | 5.0                  | 1.0                     | 5.0                      | 5.0                     | 0.5                     |

### QA/QC Data - Total Metals EPA-6020

| Sample Number: QC Batch |              |                |                |                        |                |                |     |
|-------------------------|--------------|----------------|----------------|------------------------|----------------|----------------|-----|
|                         | Matrix Spike |                |                | Matrix Spike Duplicate |                |                | RPD |
|                         | Spiked Conc. | Measured Conc. | Spike Recovery | Spiked Conc.           | Measured Conc. | Spike Recovery |     |
|                         | (mg/kg)      | (mg/kg)        | (%)            | (mg/kg)                | (mg/kg)        | (%)            | (%) |
| Lead                    | 79.1         | 80.7           | 102            | 94.3                   | 90.5           | 96             | 6.1 |
| Cadmium                 | 79.1         | 76.0           | 96             | 94.3                   | 91.5           | 97             | 1.0 |
| Chromium                | 79.1         | 78.6           | 99             | 94.3                   | 98.3           | 104            | 4.8 |
| Arsenic                 | 79.1         | 85.6           | 108            | 94.3                   | 106            | 112            | 3.8 |
| Mercury                 | 7.91         | 9.5            | 120            | 9.43                   | 11.8           | 125M           | 4.3 |

| Laboratory Control Sample |              |                |                |
|---------------------------|--------------|----------------|----------------|
|                           | Spiked Conc. | Measured Conc. | Spike Recovery |
|                           | (mg/kg)      | (mg/kg)        | (%)            |
| Lead                      | 100          | 101            | 101            |
| Cadmium                   | 100          | 100            | 100            |
| Chromium                  | 100          | 103            | 103            |
| Arsenic                   | 100          | 105            | 105            |
| Mercury                   | 10.0         | 11.9           | 119            |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 80%-120%

ACCEPTABLE RPD IS 35%

M - Matrix Spike recovery failed due to matrix interference.

# CHAIN-OF-CUSTODY RECORD

CLIENT: AEG DATE: 9.10.15 PAGE 1 OF 1

ADDRESS: 605 11th AVE SE PROJECT NAME: H+H

PHONE: 360 352 9835 FAX: \_\_\_\_\_ LOCATION: FIFE

CLIENT PROJECT #: \_\_\_\_\_ PROJECT MANAGER: Shawn COLLECTOR: Shawn DATE OF COLLECTION: 9.10.15

| Sample Number   | Depth    | Time       | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           | NOTES    | Total Number of Containers | Laboratory Note Number |
|-----------------|----------|------------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|-----------|----------|----------------------------|------------------------|
|                 |          |            |             |                | TPH - HClD | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite | WO Suite |                            |                        |
| 1. <u>H565'</u> | <u>5</u> | <u>830</u> | <u>SOIL</u> | <u>2. Jars</u> | <u>X</u>   | <u>X</u>           | <u>X</u>       |      |            |          | <u>X</u>     | <u>+</u>   |            |                    |               |               |    |                |           |           | <u>+</u> |                            |                        |
| 2. <u>H74'</u>  | <u>4</u> | <u>930</u> | <u>SOIL</u> | <u>"</u>       | <u>X</u>   | <u>X</u>           | <u>X</u>       |      |            |          | <u>X</u>     | <u>+</u>   |            |                    |               |               |    |                |           |           | <u>+</u> |                            |                        |
| 3.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 4.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 5.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 6.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 7.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 8.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 9.              |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 10.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 11.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 12.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 13.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 14.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 15.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 16.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 17.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 18.             |          |            |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |

|                             |                     |                         |                     |                               |  |                                     |
|-----------------------------|---------------------|-------------------------|---------------------|-------------------------------|--|-------------------------------------|
| RELINQUISHED BY (Signature) | DATE/TIME           | RECEIVED BY (Signature) | DATE/TIME           | SAMPLE RECEIPT                |  | LABORATORY NOTES:                   |
| <u>[Signature]</u>          | <u>1335 9.10.15</u> | <u>[Signature]</u>      | <u>1335 9.10.15</u> | TOTAL NUMBER OF CONTAINERS    |  |                                     |
| RELINQUISHED BY (Signature) | DATE/TIME           | RECEIVED BY (Signature) | DATE/TIME           | CHAIN OF CUSTODY SEALS Y/N/NA |  |                                     |
|                             |                     |                         |                     | SEALS INTACT? Y/N/NA          |  |                                     |
|                             |                     |                         |                     | RECEIVED GOOD COND./COLD      |  |                                     |
|                             |                     |                         |                     | NOTES:                        |  | Turn Around Time: 24 HR 48 HR 5 DAY |



# CHAIN-OF-CUSTODY RECORD

CLIENT: AEG DATE: 9.11.15 PAGE 1 OF 1

ADDRESS: 605 11th AVE E. PROJECT NAME: H+H

PHONE: 360 352 9835 FAX:  LOCATION: 407 PORTER MILTON WA

CLIENT PROJECT #:  PROJECT MANAGER: SHAWN COLLECTOR: SHAWN DATE OF COLLECTION: 9.11

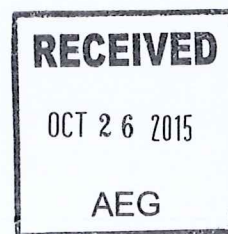
| Sample Number | Depth    | Time | Sample Type | Container Type | ANALYSES    |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          | NOTES | Total Number of Containers | Laboratory | Note Number |                 |  |  |
|---------------|----------|------|-------------|----------------|-------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|----|----------------|-----------|-----------|----------|-------|----------------------------|------------|-------------|-----------------|--|--|
|               |          |      |             |                | TPH - HCID  | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite | WO Suite |       |                            |            |             | HEX CHL         |  |  |
| 1.            | HS BSP   | -    | 745         | SOIL           | 2.00A 5-TAR | X                  | X              | X    |            | X        | X            | X          |            |                    | X             |    |                |           |           |          |       | X                          |            |             | SIL. 6ELCU      |  |  |
| 2.            | HS 9 SP  | -    | 800         | ↓              |             | X                  | X              | X    |            | X        | X            | X          |            |                    | X             |    |                |           |           |          |       | X                          |            |             | ON              |  |  |
| 3.            | HS 10 SP | -    | 815         | ↓              |             | X                  | X              | X    |            | X        | X            | X          |            |                    | X             |    |                |           |           |          |       | X                          |            |             | DX+EXT          |  |  |
| 4.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 5.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 6.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 7.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             | * RUN           |  |  |
| 8.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             | TPH GX, DX+EXT, |  |  |
| 9.            |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             | BTEX, MTCA 5 ME |  |  |
| 10.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             | * HOLD AT THE   |  |  |
| 11.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             | REST            |  |  |
| 12.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 13.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 14.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 15.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 16.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 17.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |
| 18.           |          |      |             |                |             |                    |                |      |            |          |              |            |            |                    |               |    |                |           |           |          |       |                            |            |             |                 |  |  |

|                             |           |                         |           |                               |  |                                     |
|-----------------------------|-----------|-------------------------|-----------|-------------------------------|--|-------------------------------------|
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | SAMPLE RECEIPT                |  | LABORATORY NOTES:                   |
|                             | 9.11.15   |                         | 9/11/15   | TOTAL NUMBER OF CONTAINERS    |  |                                     |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | CHAIN OF CUSTODY SEALS Y/N/NA |  |                                     |
|                             |           |                         |           | SEALS INTACT? Y/N/NA          |  |                                     |
|                             |           |                         |           | RECEIVED GOOD COND./COLD      |  | Turn Around Time: 24 HR 48 HR 5 DAY |
|                             |           |                         |           | NOTES:                        |  |                                     |



October 16, 2015

Shawn Lombardini  
Associated Environmental Group, Inc.  
605 11th Ave. SE, Suite 201  
Olympia, WA 98501



Dear Mr. Lombardini:

Please find enclosed the analytical data report for the H & H Property Project in Milton, Washington. Probe services were conducted on September 29, 2015. Soil and water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended with Silica Gel Cleanup, Gasoline by NWTPH-Gx, BTEX by Method 8260, and Naphthalene on October 2 - 12, 2015.

The results of the analyses are summarized in the attached table. 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,

A handwritten signature in cursive script that reads "Michael A. Korosec".

Michael A. Korosec  
President



## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H Property  
PROJECT #15-112  
Milton, Washington

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

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx Extended with Silica Gel Clean Up

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (mg/kg) | Lube Oil Range Organics (mg/kg) |
|------------------|---------------|---------------|------------------------|-------------------------------|---------------------------------|
| Method Blank     | 10/7/2015     | 10/7/2015     | 107                    | nd                            | nd                              |
| LCS              | 10/7/2015     | 10/7/2015     | 100                    | 91%                           | ---                             |
| B11-MW4-5        | 10/7/2015     | 10/7/2015     | 99                     | 370                           | nd                              |
| B12-MW5-5        | 10/7/2015     | 10/7/2015     | 97                     | nd                            | nd                              |
| B13-MW6-5        | 10/7/2015     | 10/7/2015     | 110                    | nd                            | 630                             |
| Reporting 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**

Associated Environmental Group  
PROJECT H&H Property  
PROJECT #15-112  
Milton, Washington

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

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

| Sample Number    | Date Prepared | Date Analyzed | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | Naphthalene (mg/kg) | Gasoline Range Organics (mg/kg) | Surrogate Recovery (%) |
|------------------|---------------|---------------|-----------------|-----------------|----------------------|-----------------|---------------------|---------------------------------|------------------------|
| Method Blank     | 10/2/2015     | 10/2/2015     | nd              | nd              | nd                   | nd              | nd                  | nd                              | 106                    |
| LCS              | 10/2/2015     | 10/2/2015     | 117%            | 93%             | 92%                  | 89%             | ---                 | 121%                            | 102                    |
| LCSD             | 10/2/2015     | 10/2/2015     | 117%            | 97%             | 98%                  | 92%             | ---                 | ---                             | 97                     |
| B11-MW4-5        | 9/29/2015     | 10/2/2015     | nd              | nd              | 1.9                  | nd              | 0.48                | 280                             | 111                    |
| B12-MW5-5        | 9/29/2015     | 10/2/2015     | nd              | nd              | 0.14                 | 0.82            | 0.29                | 38                              | 105                    |
| B13-MW6-5        | 9/29/2015     | 10/2/2015     | nd              | nd              | nd                   | nd              | 0.21                | 53                              | 105                    |
| Reporting Limits |               |               | 0.02            | 0.05            | 0.05                 | 0.15            | 0.05                | 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 (Bromofluorobenzene) & LCS : 65% TO 135%

# CHAIN-OF-CUSTODY RECORD

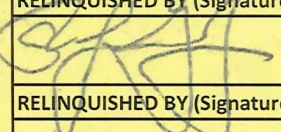
CLIENT: ARG DATE: 9.29.15 PAGE 1 OF 1

ADDRESS: 407 PORTER 605 11th AVE NE PROJECT NAME: H+H

PHONE: 253 334 4782 FAX: \_\_\_\_\_ LOCATION: 407 PORTER WAY

CLIENT PROJECT #: \_\_\_\_\_ PROJECT MANAGER: SHAWN COLLECTOR: SHAWN DATE OF COLLECTION: 9.29.15

| Sample Number  | Depth | Time | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           | NOTES | Total Number of Containers | Laboratory Note Number |           |          |  |  |                       |  |  |
|----------------|-------|------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|-------|----------------------------|------------------------|-----------|----------|--|--|-----------------------|--|--|
|                |       |      |             |                | TPH - HClD | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite |       |                            |                        | DRO Suite | WO Suite |  |  |                       |  |  |
| 1. B11 / MW 45 | 5     | 905  | SOIL        | 240Z           |            | X                  | X              | X    |            | X        |              | X          | X          |                    | X             |               |    |                |           |       |                            |                        |           |          |  |  | *DX SELECTA GET CLEAN |  |  |
| 2. B11 MW 4    | 10    | 910  |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 3. B11 MW 4    | 15    | 915  |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 4. B12 MW 5    | 5     | 1030 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 5. B12 MW 5    | 10    | 1035 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 6. B12 MW 5    | 15    | 1046 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 7. B13 MW 6    | 5     | 1215 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 8. B13 MW 6    | 10    | 1230 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 9.             |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 10.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 11.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 12.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 13.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 14.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 15.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 16.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 17.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |
| 18.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |       |                            |                        |           |          |  |  |                       |  |  |

|   |           |                         |              |                               |  |  |
|---|-----------|-------------------------|--------------|-------------------------------|--|--|
| RELINQUISHED BY (Signature)   | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME    | SAMPLE RECEIPT                |  | LABORATORY NOTES:<br><br><u>Hand until CALLED</u><br><br>Turn Around Time: 24 HR 48 HR 5 DAY |
|  |           | <u>Shawn</u>            | <u>10-15</u> | TOTAL NUMBER OF CONTAINERS    |  |  |
|   |           |                         |              | CHAIN OF CUSTODY SEALS Y/N/NA |  |  |
|   |           |                         |              | SEALS INTACT? Y/N/NA          |  |  |
|   |           |                         |              | RECEIVED GOOD COND./COLD      |  |  |
| RELINQUISHED BY (Signature)   | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME    | NOTES:                        |  |  |

## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H  
PROJECT #15-112  
Milton, Washington

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

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx Extended with Silica Gel Clean Up

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (ug/L) | Lube Oil Range Organics (ug/L) |
|------------------|---------------|---------------|------------------------|------------------------------|--------------------------------|
| Method Blank     | 10/9/2015     | 10/9/2015     | 104                    | nd                           | nd                             |
| LCS              | 10/9/2015     | 10/9/2015     | 105                    | 126%                         | ---                            |
| MW 5             | 10/9/2015     | 10/9/2015     | 102                    | nd                           | nd                             |
| MW 4             | 10/9/2015     | 10/9/2015     | 114                    | nd                           | nd                             |
| MW 6             | 10/9/2015     | 10/12/2015    | 109                    | nd                           | nd                             |
| Reporting Limits |               |               |                        | 250                          | 500                            |

"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

Associated Environmental Group  
PROJECT H&H  
PROJECT #15-112  
Milton, Washington

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

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

| Sample Number    | Date Analyzed | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | Gasoline Range Organics (ug/L) | Surrogate Recovery (%) |
|------------------|---------------|----------------|----------------|---------------------|----------------|--------------------------------|------------------------|
| Method Blank     | 10/12/2015    | nd             | nd             | nd                  | nd             | nd                             | 98                     |
| LCS              | 10/12/2015    | 104%           | 104%           | 97%                 | 107%           | 75%                            | 93                     |
| LCSD             | 10/12/2015    | 102%           | 112%           | 111%                | 112%           | ---                            | 111                    |
| MW 5             | 10/12/2015    | nd             | 2.7            | 7.1                 | nd             | nd                             | 100                    |
| MW 4             | 10/12/2015    | nd             | 47             | 1.1                 | 6.7            | 130                            | 100                    |
| MW 6             | 10/12/2015    | nd             | nd             | nd                  | nd             | nd                             | 101                    |
| Reporting Limits |               | 1.0            | 1.0            | 1.0                 | 3.0            | 100                            |                        |

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

"int" Indicates that interference prevents determination.

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

## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H  
PROJECT #15-112  
Milton, Washington

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

### Analysis of Naphthalenes in Water by Method 8270

#### Analytical Results

|                     | Reporting | MTH BLK  | LCS      | MW 5     | MW 4     | MW 6     |
|---------------------|-----------|----------|----------|----------|----------|----------|
| Date extracted      | Limits    | 10/09/15 | 10/09/15 | 10/09/15 | 10/09/15 | 10/09/15 |
| Date analyzed       | (ug/L)    | 10/09/15 | 10/09/15 | 10/09/15 | 10/09/15 | 10/12/15 |
| Naphthalene         | 0.1       | nd       | 98%      | 0.60     | 0.40     | 0.50     |
| 2-Methylnaphthalene | 0.1       | nd       | 106%     | nd       | nd       | 0.90     |
| 1-Methylnaphthalene | 0.1       | nd       | ns       | nd       | nd       | 0.80     |

#### Surrogate recoveries:

|                  |     |     |     |      |     |
|------------------|-----|-----|-----|------|-----|
| 2-Fluorobiphenyl | 97% | 99% | 88% | 96%  | 92% |
| p-Terphenyl-d14  | 91% | 97% | 89% | 100% | 96% |

#### Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

ns - not spiked

Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%



## CHAIN-OF-CUSTODY RECORD

[illegible]

February 4, 2016

Shawn Lombardini  
Associated Environmental Group, Inc.  
605 11th Ave. SE, Suite 201  
Olympia, WA 98501



Dear Mr. Lombardini:

Please find enclosed the analytical data report for the H & H Project in Milton, Washington. Water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended with Silica Gel Clean up, Gasoline by NWTPH-Gx, BTEX by Method 8260, and Naphthalenes by Method 8270 on January 28 - February 1, 2016.

The results of the analyses are summarized in the attached table. 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,

A handwritten signature in cursive script that reads "Michael A. Korosec".

Michael A. Korosec  
President



## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H  
Milton, Washington

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

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx Extended

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (ug/L) | Lube Oil Range Organics (ug/L) |
|------------------|---------------|---------------|------------------------|------------------------------|--------------------------------|
| Method Blank     | 1/28/2016     | 1/28/2016     | 95                     | nd                           | nd                             |
| LCS              | 1/28/2016     | 1/28/2016     | 89                     | 111%                         | ---                            |
| MW6 W            | 1/28/2016     | 1/28/2016     | 114                    | nd                           | nd                             |
| MW5 W            | 1/28/2016     | 1/28/2016     | 114                    | nd                           | nd                             |
| Reporting Limits |               |               |                        | 250                          | 500                            |

"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

Associated Environmental Group  
PROJECT H&H  
Milton, Washington

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Olympia, WA 98501  
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lab@esnnw.com

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

| Sample Number    | Date Analyzed | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | Gasoline Range Organics (ug/L) | Surrogate Recovery (%) |
|------------------|---------------|----------------|----------------|---------------------|----------------|--------------------------------|------------------------|
| Method Blank     | 2/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 94                     |
| LCS              | 2/1/2016      | 69%            | 69%            | 75%                 | 75%            | 78%                            | 95                     |
| LCSD             | 2/1/2016      | 78%            | 73%            | 77%                 | 80%            | ---                            | 93                     |
| MW6 W            | 2/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 99                     |
| MW5 W            | 2/1/2016      | nd             | <b>40</b>      | <b>2.1</b>          | <b>11</b>      | <b>220</b>                     | 95                     |
| Trip Blank       | 2/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 98                     |
| Reporting Limits |               | 1.0            | 1.0            | 1.0                 | 3.0            | 100                            |                        |

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

"int" Indicates that interference prevents determination.

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

## ESN NORTHWEST CHEMISTRY LABORATORY

Associated Environmental Group  
PROJECT H&H  
Milton, Washington

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lab@esnnw.com

### Analysis of Naphthalenes in Water by Method 8270

#### Analytical Results

|                     | Reporting | MTH BLK  | LCS      | MW 5W    | MW 6W       |
|---------------------|-----------|----------|----------|----------|-------------|
| Date extracted      | Limits    | 01/28/16 | 01/28/16 | 01/28/16 | 01/28/16    |
| Date analyzed       | (ug/L)    | 01/28/16 | 01/28/16 | 01/28/16 | 01/28/16    |
| Naphthalene         | 0.1       | nd       | 89%      | nd       | nd          |
| 2-Methylnaphthalene | 0.1       | nd       | 89%      | nd       | <b>0.70</b> |
| 1-Methylnaphthalene | 0.1       | nd       | ns       | nd       | <b>1.2</b>  |

#### Surrogate recoveries:

|                  |     |     |      |      |
|------------------|-----|-----|------|------|
| 2-Fluorobiphenyl | 84% | 92% | 101% | 97%  |
| p-Terphenyl-d14  | 82% | 79% | 104% | 101% |

#### Data Qualifiers and Analytical Comments

\* - Carcinogenic Analyte

nd - not detected at listed reporting limits

ns - not spiked

Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%

C - coelution with sample peaks

M - matrix interference

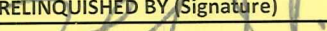
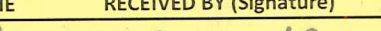
J - estimated value

# CHAIN-OF-CUSTODY RECORD

|                                  |                                 |   |
|----------------------------------|---------------------------------|---|
| CLIENT: <u>ARL</u>               | DATE: <u>1.2.16</u>             | PAGE <u>1</u> OF <u>1</u>                                 |
| ADDRESS: <u>605 11th AVE SE.</u> | PROJECT NAME: <u>H+H</u>        |   |
| PHONE: <u>352 9835</u>           | LOCATION: <u>407 PORTER WAY</u> |   |
| CLIENT PROJECT #:                | PROJECT MANAGER: <u>SHAWN</u>   | COLLECTOR: <u>SHAWN</u> DATE OF COLLECTION: <u>1.2.16</u> |

[illegible]

\* PLEASE  
USE  
GLUCAL CLEANING  
GEL  
TX.

| RELINQUISHED BY (Signature)   |  | DATE/TIME | RECEIVED BY (Signature)   | DATE/TIME | SAMPLE RECEIPT                |  | LABORATORY NOTES:                   |
|---|--|-----------|---|-----------|-------------------------------|--|-------------------------------------|
|  |  | 1-28-16   |  | 1/28/16   | TOTAL NUMBER OF CONTAINERS    |  |                                     |
|   |  |           |   |           | CHAIN OF CUSTODY SEALS Y/N/NA |  |                                     |
| RELINQUISHED BY (Signature)   |  | DATE/TIME | RECEIVED BY (Signature)   | DATE/TIME | SEALS INTACT? Y/N/NA          |  |                                     |
|   |  |           |   |           | RECEIVED GOOD COND./COLD      |  |                                     |
|   |  |           |   |           | NOTES:                        |  | Turn Around Time: 24 HR 48 HR 5 DAY |

## Lab

---

**From:** Shawn Lombardini [slombardini@aegwa.com]  
**Sent:** Thursday, March 24, 2016 3:58 PM  
**To:** 'Lab'  
**Subject:** H and H sample labels

I labeled the samples as MW-1 MW-2 and MW-3, could you report them as MW-1 = MW-4, MW-2 = MW-5 and MW-3 = MW-6....? My fault.

Thanks!



**Shawn Lombardini LG**

Associated Environmental Group, LLC  
605 11<sup>th</sup> Avenue SE, Suite 201  
Olympia, WA 98501  
P. 360-352-9835  
C. 253-334-4782  
F. 360-352-8164  
[slombardini@aegwa.com](mailto:slombardini@aegwa.com)



April 5, 2016



Shawn Lombardini  
Associated Environmental Group, Inc.  
605 11th Ave. SE, Suite 201  
Olympia, WA 98501

Dear Mr. Lombardini:

Please find enclosed the analytical data report for the H & H Project in Milton, Washington. Water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended, Gasoline by NWTPH-Gx, BTEX by Method 8260, and Naphthalene on March 25 and April 1, 2016.

The results of the analyses are summarized in the attached table. 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,

A handwritten signature in cursive script that reads "Michael A. Korosec".

Michael A. Korosec  
President

## ESN NORTHWEST CHEMISTRY LABORATORY

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PROJECT H&H Diesel  
Milton, Washington

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Olympia, WA 98501  
(360) 459-4670 (360) 459-3432 Fax  
lab@esnww.com

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx Extended

| Sample Number    | Date Prepared | Date Analyzed | Surrogate Recovery (%) | Diesel Range Organics (ug/L) | Lube Oil Range Organics (ug/L) |
|------------------|---------------|---------------|------------------------|------------------------------|--------------------------------|
| Method Blank     | 3/25/2016     | 3/25/2016     | 100                    | nd                           | nd                             |
| LCS              | 3/25/2016     | 3/25/2016     | 118                    | 94%                          | ---                            |
| MW 5             | 3/25/2016     | 3/25/2016     | 122                    | nd                           | nd                             |
| MW 4             | 3/25/2016     | 3/25/2016     | 124                    | nd                           | nd                             |
| MW 6             | 3/25/2016     | 3/25/2016     | 121                    | nd                           | nd                             |
| Reporting Limits |               |               |                        | 250                          | 500                            |

"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

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Milton, Washington

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

| Sample Number    | Date Analyzed | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | Gasoline Range Organics (ug/L) | Surrogate Recovery (%) |
|------------------|---------------|----------------|----------------|---------------------|----------------|--------------------------------|------------------------|
| Method Blank     | 4/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 113                    |
| LCS              | 4/1/2016      | 113%           | 93%            | 99%                 | 101%           | 101%                           | 108                    |
| LCSD             | 4/1/2016      | 124%           | 107%           | 116%                | 111%           | ---                            | 106                    |
| MW 5             | 4/1/2016      | nd             | 45             | 2.3                 | 13             | 270                            | 116                    |
| MW 5 Duplicate   | 4/1/2016      | nd             | 44             | 2.2                 | 13             | 250                            | 119                    |
| MW 4             | 4/1/2016      | nd             | 3.9            | 4.7                 | nd             | nd                             | 116                    |
| MW 6             | 4/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 121                    |
| Reporting Limits |               | 1.0            | 1.0            | 1.0                 | 3.0            | 100                            |                        |

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

"int" Indicates that interference prevents determination.

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



## ESN NORTHWEST CHEMISTRY LABORATORY

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### Analysis of Polynuclear Aromatic Hydrocarbons in Water by Method 8270

#### Analytical Results

|                     | Reporting | MTH BLK  | LCS      | MW-5     | MW-4     | MW-6     |
|---------------------|-----------|----------|----------|----------|----------|----------|
| Date extracted      | Limits    | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 |
| Date analyzed       | (ug/L)    | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 |
| Naphthalene         | 0.1       | nd       | 90%      | nd       | nd       | nd       |
| 2-Methylnaphthalene | 0.1       | nd       | 134%     | nd       | nd       | nd       |
| 1-Methylnaphthalene | 0.1       | nd       | ns       | nd       | nd       | nd       |

#### Surrogate recoveries:

|                  |     |     |      |     |      |
|------------------|-----|-----|------|-----|------|
| 2-Fluorobiphenyl | 98% | 59% | 102% | 64% | 69%  |
| p-Terphenyl-d14  | 91% | 51% | 106% | 83% | 102% |

#### Data Qualifiers and Analytical Comments

\* - Carcinogenic Analyte

nd - not detected at listed reporting limits

ns - not spiked

Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%

# CHAIN-OF-CUSTODY RECORD

CLIENT: AEG DATE: 3/24/16 PAGE 1 OF 1

ADDRESS: 605 11th AVE SE OLYMPIA PROJECT NAME: H4H DESEA

PHONE: 360 352 9835 FAX: \_\_\_\_\_ LOCATION: MELTON WD

CLIENT PROJECT #: \_\_\_\_\_ PROJECT MANAGER: SHOWN COLLECTOR: SHOWN DATE OF COLLECTION: 03/24/16

| Sample Number | Depth | Time | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                | NOTES     | Total Number of Containers | Laboratory | Note Number |
|---------------|-------|------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|----------------------------|------------|-------------|
|               |       |      |             |                | TPH - HClD | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite                  | WO Suite   | WATERSHED   |
| 1. MW 2       | -     | 0810 | H2O         | 200ml / 10ml   | X          | X                  | X              |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 2. MW 1       | -     | 0900 | ↓           | ↓              | ↓          | ↓                  | ↓              |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 3. MW 3       | -     | 0950 | ↓           | ↓              | ↓          | ↓                  | ↓              |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 4.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 5.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 6.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 7.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 8.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 9.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 10.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 11.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 12.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 13.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 14.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 15.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 16.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 17.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |
| 18.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |                            |            |             |

|                             |           |                         |                  |                                     |  |                   |
|-----------------------------|-----------|-------------------------|------------------|-------------------------------------|--|-------------------|
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME        | SAMPLE RECEIPT                      |  | LABORATORY NOTES: |
| [Signature]                 |           | [Signature]             | 10/24/16<br>1055 | TOTAL NUMBER OF CONTAINERS          |  |                   |
|                             |           |                         |                  | CHAIN OF CUSTODY SEALS Y/N/NA       |  |                   |
|                             |           |                         |                  | SEALS INTACT? Y/N/NA                |  |                   |
|                             |           |                         |                  | RECEIVED GOOD COND./COLD            |  |                   |
| NOTES:                      |           |                         |                  | Turn Around Time: 24 HR 48 HR 5 DAY |  |                   |

## ESN NORTHWEST CHEMISTRY LABORATORY

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PROJECT H&H Diesel  
Milton, Washington

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(360) 459-4670 (360) 459-3432 Fax  
lab@esnww.com

### Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx Extended

| Sample<br>Number | Date<br>Prepared | Date<br>Analyzed | Surrogate<br>Recovery (%) | Diesel Range Organics<br>(ug/L) | Lube Oil Range Organics<br>(ug/L) |
|------------------|------------------|------------------|---------------------------|---------------------------------|-----------------------------------|
| Method Blank     | 3/25/2016        | 3/25/2016        | 100                       | nd                              | nd                                |
| LCS              | 3/25/2016        | 3/25/2016        | 118                       | 94%                             | ---                               |
| MW 5             | 3/25/2016        | 3/25/2016        | 122                       | nd                              | nd                                |
| MW 4             | 3/25/2016        | 3/25/2016        | 124                       | nd                              | nd                                |
| MW 6             | 3/25/2016        | 3/25/2016        | 121                       | nd                              | nd                                |
| Reporting Limits |                  |                  |                           | 250                             | 500                               |

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

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

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lab@esnww.com

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

| Sample Number    | Date Analyzed | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | Gasoline Range Organics (ug/L) | Surrogate Recovery (%) |
|------------------|---------------|----------------|----------------|---------------------|----------------|--------------------------------|------------------------|
| Method Blank     | 4/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 113                    |
| LCS              | 4/1/2016      | 113%           | 93%            | 99%                 | 101%           | 101%                           | 108                    |
| LCSD             | 4/1/2016      | 124%           | 107%           | 116%                | 111%           | ---                            | 106                    |
| MW 5             | 4/1/2016      | nd             | 45             | 2.3                 | 13             | 270                            | 116                    |
| MW 5 Duplicate   | 4/1/2016      | nd             | 44             | 2.2                 | 13             | 250                            | 119                    |
| MW 4             | 4/1/2016      | nd             | 3.9            | 4.7                 | nd             | nd                             | 116                    |
| MW 6             | 4/1/2016      | nd             | nd             | nd                  | nd             | nd                             | 121                    |
| Reporting Limits |               | 1.0            | 1.0            | 1.0                 | 3.0            | 100                            |                        |

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

"int" Indicates that interference prevents determination.

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

**ESN NORTHWEST CHEMISTRY LABORATORY**

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PROJECT H&H Diesel  
Milton, Washington

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lab@esnnw.com

**Analysis of Polynuclear Aromatic Hydrocarbons in Water by Method 8270****Analytical Results**

|                     | Reporting | MTH BLK  | LCS      | MW-5     | MW-4     | MW-6     |
|---------------------|-----------|----------|----------|----------|----------|----------|
| Date extracted      | Limits    | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 |
| Date analyzed       | (ug/L)    | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 | 03/25/16 |
| Naphthalene         | 0.1       | nd       | 90%      | nd       | nd       | nd       |
| 2-Methylnaphthalene | 0.1       | nd       | 134%     | nd       | nd       | nd       |
| 1-Methylnaphthalene | 0.1       | nd       | ns       | nd       | nd       | nd       |

**Surrogate recoveries:**

|                  |     |     |      |     |      |
|------------------|-----|-----|------|-----|------|
| 2-Fluorobiphenyl | 98% | 59% | 102% | 64% | 69%  |
| p-Terphenyl-d14  | 91% | 51% | 106% | 83% | 102% |

**Data Qualifiers and Analytical Comments**

\* - Carcinogenic Analyte

nd - not detected at listed reporting limits

ns - not spiked

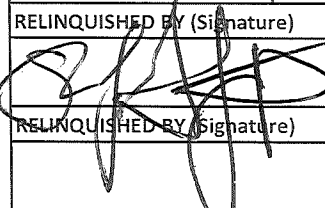
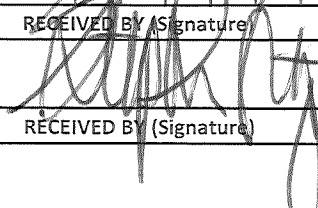
Acceptable Recovery limits: 50% TO 150%

Acceptable RPD limit: 35%

# CHAIN-OF-CUSTODY RECORD

CLIENT: ACL DATE: 3/24/16 PAGE 1 OF 1  
 ADDRESS: 605 11th AVE SE OLYMPIA PROJECT NAME: HHH DEBR  
 PHONE: 360 352 9835 FAX: \_\_\_\_\_ LOCATION: MELTON WA  
 CLIENT PROJECT #: \_\_\_\_\_ PROJECT MANAGER: SKHUN COLLECTOR: SKHUN DATE OF COLLECTION: \_\_\_\_\_

| Sample Number | Depth | Time | Sample Type | Container Type | ANALYSES   |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           | NOTES    | Total Number of Containers | Laboratory Note Number |
|---------------|-------|------|-------------|----------------|------------|--------------------|----------------|------|------------|----------|--------------|------------|------------|--------------------|---------------|---------------|----|----------------|-----------|-----------|----------|----------------------------|------------------------|
|               |       |      |             |                | TPH - HClD | TPH - Diesel & Oil | TPH - Gasoline | BTEX | VOC 8260CL | VOC 8260 | SemiVol 8270 | PAH's 8270 | PCB's 8082 | CL Pesticides 8081 | RCRA 8 Metals | MTCA 5 Metals | Pb | Asbestos - PLM | GRO Suite | DRO Suite | WO Suite |                            |                        |
| 1. MW 2       | -     | 0810 | H2O         | 200ml / 100ml  | X          | X                  | X              |      |            |          |              |            |            |                    |               |               |    |                |           |           | X        |                            |                        |
| 2. MW 1       | -     | 0900 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 3. MW 3       | -     | 0950 |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 4.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 5.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 6.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 7.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 8.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 9.            |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 10.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 11.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 12.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 13.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 14.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 15.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 16.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 17.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |
| 18.           |       |      |             |                |            |                    |                |      |            |          |              |            |            |                    |               |               |    |                |           |           |          |                            |                        |

|  |           |   |                  |                                     |  |                   |
|--|-----------|---|------------------|-------------------------------------|--|-------------------|
| RELINQUISHED BY (Signature)  | DATE/TIME | RECEIVED BY (Signature)   | DATE/TIME        | SAMPLE RECEIPT                      |  | LABORATORY NOTES: |
|  |           |  | 10-24-16<br>1055 | TOTAL NUMBER OF CONTAINERS          |  |                   |
|  |           |   |                  | CHAIN OF CUSTODY SEALS Y/N/NA       |  |                   |
|  |           |   |                  | SEALS INTACT? Y/N/NA                |  |                   |
|  |           |   |                  | RECEIVED GOOD COND./COLD            |  |                   |
| NOTES:   |           |   |                  | Turn Around Time: 24 HR 48 HR 5 DAY |  |                   |