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**PROPOSED CORRECTIVE ACTION PLAN
RESTOVER TRUCK STOP
2725 – 93rd Avenue SW
Olympia, Washington**

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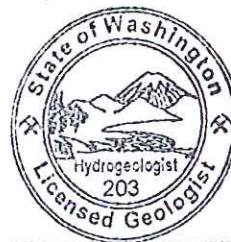


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1.0 INTRODUCTION

Associated Environmental Group, LLC (AEG) has prepared for consideration this Corrective Action Plan (CAP) to be performed at the Former Restover Truck Stop property located at 2725 – 93rd Avenue SW, Olympia, Thurston County, Washington (the Site). This Plan describes the property, environmental conditions, remedial action objectives, and the appropriate cleanup action standards selected under the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA). It also describes the compliance (protection, performance, and confirmational) groundwater monitoring/sampling events that will be conducted at the Site.

The proposed CAP was developed in accordance with the MTCA cleanup regulations as they are described in Chapter 173-340 of the Washington Administrative Code (WAC) (Ecology, 2001, and revised 2007). Well construction and decommissioning will be performed according to Chapter 173-160 and 173-162 of the WAC.

1.1 *Subject Site*

The property, Thurston County Parcel Number 12721210200, is approximately 5.5 acres in size, contains the former Restover Truck Stop, which was comprised of a vehicle fueling area, retail sales, a convenience store, a restaurant, and a motel. The Site ceased operation in April of 2014 and remains as it was when operating. The address assigned to the property is 2725 – 93rd Avenue SW, Olympia, Washington. A general location map is provided as Figure 1, *Site and Vicinity Map*. A Site diagram, indicating approximate parcel boundaries, is included as Figure 2, *Site Map*.

The service station portion of the Site incorporated an associated convenience store, and three 10,000-gallon diesel underground storage tanks (USTs), with one of the diesel tanks associated with a separate commercial card-lock facility operated by the Commercial Fueling Network (CFN). The Site also has one 10,000-gallon regular gasoline UST, and one 6,000-gallon premium gasoline UST. All of the USTs were incorporated into a UST nest located north of the convenience store. Four gasoline dispensers under a canopy are located east of the convenience store. Eight-diesel fuel dispensers under a bay are located west of the convenience store (including three dispensers associated with the CFN system). A 2,000-gallon diesel UST that was decommissioned in-place was located adjacent to and north of the convenience store.

According to Ecology records, the four 10,000-gallon tanks were installed in 1969 and upgraded in 1991, and the 6,000-gallon UST was installed in 1971 and upgraded in 1991. The gasoline USTs are constructed of single wall fiberglass with single-wall product lines protected with automatic line leak detection. The diesel tank was a steel “STP tank” with sacrificial anodes for

corrosion protection, steel product lines, and a release detection mechanism. Figure 2, *Site Map*, presents the general layout of the Site.

Ecology in MTCA defines a Site/Facility as:

"...any building, structure, installation, equipment, pipe or pipeline...well, pits, pond, lagoon, impoundment, ditch, landfill, storage container...or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located." (WAC 173-340-200)

Under this definition, a Site is not limited to the legal property boundaries and can extend to other properties both private and public if contamination has migrated to them. For the Restover Truck Stop, the "Site" includes the legal property on which the structures and USTs are located, and areas under the right-of-way for 93rd Avenue. Currently, the Site is located on the immediate area of the property.

1.2 Site History

1.2.1 Initial Discovery and Ecology Response – 1971-2005

The truck stop has been operated by Cosden Oil, Incorporated since 1969. Cosden Oil had a lease agreement with the owners of the property. In 1971, a shallow domestic water well located north of 93rd Avenue was reported contaminated with petroleum hydrocarbons. Petroleum product was reported in other shallow wells, successively farther from the truck stop, through 1982.

From 1976 to 1984, Ecology performed a number of investigations at the Restover Truck Stop which resulted in enforcement actions to halt the release of petroleum hydrocarbons to the subsurface. Ecology estimated that approximately 65,000 gallons of gasoline were lost between 1974 and 1981. In addition, in 1979, a fuel spill occurred when a logging truck struck a fuel dispenser. Approximately 2,000 gallons of leaded gasoline and diesel oil was released to the ground.

In 1983, Ecology issued the truck stop a notice of violation and ordered that the USTs be leak tested. Results of the tests confirmed that at least one diesel tank was leaking. Subsequently, in 1983 and 1984, Ecology installed six groundwater-monitoring wells and discovered petroleum product in the groundwater.

A remedial investigation was conducted between 1985 and 1988, which defined a plume of groundwater contamination originating from the truck stop. At the peak of the investigation, a

total of 42 monitoring wells were installed and screened in the shallow aquifer, and 11 of these wells were later abandoned. Three wells were installed and screened in the lower aquifer. A feasibility study to determine the extent of remedial action was completed in 1991.

To remediate soil and groundwater contamination, an interim action, consisting of an air-sparging/vapor extraction system (VES) was initiated in the summer of 1993. Operation of the VES was terminated in the fall of 1997, after the main constituents of concern benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations had substantially decreased, and continued operation of the system was no longer cost effective. In late 1998 and early 1999, the VES and most of the remaining monitoring wells were decommissioned. Monitoring continued in monitoring well WDOE-6A until at least 2002.

Because most of the monitoring wells have been decommissioned, and with the continued decrease of BTEX concentrations in well WDOE-6A, the monitoring program was reduced to a five-year cycle. Currently, the only well being monitored is WDOE-6AR which replaced well WDOE-6A after excavation at the Site.

Ecology records also indicate that a restrictive covenant was filed on the property in 2001 to address residual contamination in the groundwater. The restrictive covenant needs to be maintained as long as contamination remains in the soil and/or the groundwater at concentrations above the Ecology MTCA Method A cleanup levels. The contamination present consists of gasoline-range hydrocarbons and gasoline constituents, including BTEX compounds.

Well WDOE-6A/6AR has continued to slowly show declining concentrations of total petroleum hydrocarbons in the gasoline range (TPH-G) and benzene above the Model Toxics Control Act (MTCA) Method A cleanup levels. In an effort to accelerate the biodegradation of the TPH-G and benzene, approximately 800 pounds of Regenesys' Oxygen Releasing Compound - Advanced (ORC-A[®]) was injected into the subsurface around well WDOE-6A in May of 2012. This appeared to have limited effect and it was suggested that there may be a pocket of residual contamination at well WDOE-6A. Based on this information, it was decided to attempt to excavate well WDOE-6A and the adjacent soil.

1.2.2 Soil Excavation, Groundwater Monitoring Well Installation, and Groundwater Sampling – 2013

On April 9, 2013, approximately 46.5 tons of petroleum contaminated soil (PCS) was excavated at the location of monitoring well WDOE-6A to a depth immediately above the saturated zone; 16 feet below ground surface (bgs). When it was estimated that the contaminated soil had been removed, soil samples were collected from the base of the excavation at 16 feet bgs and from the

north sidewall at 11 feet bgs. These samples were field screened with a photo ionization detector (PID) instrument.

The field screening did not detect petroleum hydrocarbon volatiles in the sidewall sample and detected 7.6 parts per million (ppm) of volatile constituents at 16 feet bgs. Because groundwater was found at 16 feet bgs, further excavation to a deeper depth was not possible.

Subsurface conditions at the excavation location generally consisted of a brown sand with gravel to a depth of approximately 2½ feet bgs, and then a brown medium sand to the base of the excavation at 16 feet bgs.

After collection of the samples for field screening, the excavation was backfilled with recycled concrete backfill material. To accelerate the microbial degradation of any remaining petroleum hydrocarbons in soil, 175 pounds of Regenesys' ORC-A[®] powder was added to the groundwater accumulated in the excavation at a depth of approximately 16 feet bgs. The excavation backfill was then compacted and the area repaved with asphalt. The final dimension of the excavation was approximately 8 feet long by 6 feet wide by 16 feet in depth.

During excavation, groundwater monitoring well WDOE-6A was entirely removed and transported offsite for disposal. To replace the well that was removed, on April 17, 2013, AEG and its subcontractor, Environmental Services Network NW, Inc. (ESN), drilled and installed a new monitoring well approximately 5 feet west of the excavation.

This well, designated WDOE-6AR, was drilled and constructed using a 9-inch outside diameter/4¼-inch inside diameter hollow-stemmed auger. The well was constructed using 2-inch PVC well screen and casing to a depth of 21 feet bgs. The screened interval is 15 feet long and from 5 feet to 20 feet bgs. The well was completed as a "flush-mount well" per the Ecology regulations, WAC 173-160 - *Minimum Standards for Construction and Maintenance of Wells*. A copy of the boring log and well construction diagram is attached in Appendix A, *Supporting Documents*. At the time of drilling, water was encountered at a depth of approximately 11 feet bgs.

After construction of the well, it was developed using a submersible pump to remove water with entrained fine grained sediments (fines) from the vicinity of the well screen. This was to allow the water to flow freely from the formation into the well, and also reduce the turbidity of the water during sampling. The well was then allowed to equilibrate with the formation for approximately 12 days before it was sampled.

On April 29, 2013, AEG sampled Well WDOE-6AR. Upon arriving at the site, a depth to water measurement was obtained and the well assessed for the presence of potential light non-aqueous

phase liquid (LNAPL) i.e. free product. The well was then sampled following industry standard low-flow purging and sampling techniques. The sample was collected in a laboratory provided container and placed in a portable chilled ice chest for transport to Libby Environmental, Inc. lab (Libby), a Washington State accredited environmental laboratory, for analysis.

The samples were analyzed for TPH-G and the fuel associated volatile organic compounds benzene, toluene, ethylbenzene, and total xylenes (BTEX).

The results from the analyses, as well as the historical analytical results from the destroyed well WDOE-6A, are presented in the attached Table 1, *Summary of Groundwater Analytical Results*.

The results show that the sample from monitoring well WDOE-6AR contained gasoline range TPH at 5,900 micrograms per liter (ug/l), which is above the Washington State Department of Ecology Model Toxics Control Act (MTCA) Method A cleanup level of 800 ug/l for groundwater containing benzene, and above the cleanup level of 1,000 ug/l for groundwater not containing benzene. Benzene was not detected in the sample from well WDOE-6AR. However, benzene has been historically detected in previous sampling events at the destroyed well WDOE-6A.

The concentration of gasoline TPH in the sample from well WDOE-6AR is greater than the previous sampling at well WDOE-6A. It is not known why the TPH concentration is greater but may be a result of disturbing the soil and groundwater during excavation. Because benzene is more volatile, the mixing may have caused the benzene to volatilize, resulting in the non-detection of that constituent in the groundwater sample from well WDOE-6AR.

The gasoline associated volatile organic compounds ethylbenzene, and total xylenes, were also detected in the sample from well WDOE-6AR at levels significantly below the MTCA Method A cleanup levels, at 4.89 ug/l, and 14.2 ug/l, respectively. The cleanup levels are 700 ug/l for ethylbenzene and 1,000 ug/l for total xylenes.

1.2.3 Phase I and Phase II Environmental Site Assessment - 2013

Robinson Noble, Inc. reported their Phase I and Phase II Environmental Site Assessments (ESAs) results in a report, dated November 13, 2013. This report was submitted on behalf of the Confederated Tribes of the Chehalis Reservation. The Phase II limited subsurface investigation was completed November 7 and 8, 2013. The activities included collecting soil and groundwater samples from 18 borings drilled on Site using direct-push drilling methods.

During drilling, PID field screening was used to select samples to be submitted to an on-Site mobile laboratory provided by Libby Environmental, Inc. Each sample submitted was analyzed

for gasoline-range petroleum hydrocarbons, diesel-range petroleum hydrocarbons, and oil-range petroleum hydrocarbons, as well as gasoline-range volatile organic compounds (VOCs) (Table 2, *Summary of Soil Analytical Results – Environmental Site Assessment (ESA)*, and Table 3, *Summary of Groundwater Analytical Results – Phase II ESA*).

The 18 borings were designated B1 through B-18. An additional boring, B-19, was constructed to the north across 93rd Avenue SW. The locations of the borings are shown in Figure 3, *Site Diagram with Boring and Monitoring Well Locations*. Each of the borings was completed to a depth of 20 feet bgs. The silts, sands, and occasional gravels encountered in the lower portion of each boring appear to be native and are consistent with the recessional outwash described as Qvr. Groundwater was encountered in each of the borings at approximately 17 feet bgs. Water samples were collected from temporary screens placed 15 feet to 20 feet bgs.

During drilling, significant PID readings were observed in boreholes B-1 and B-4. Soil analytical results showed elevated concentrations of gasoline-range total petroleum hydrocarbons (TPH) in B-1 at 16 feet bgs and B-4 at 10 feet bgs, and BTEX in B-4 at 10 feet bgs. A somewhat elevated benzene concentration was found in the soil sample taken from B-14 at 8 feet bgs. Groundwater analytical results were elevated for groundwater-range TPH in boreholes B-1, B-6, B-8, B-13, B-14, and B-16. Benzene exceeded MTCA groundwater cleanup levels in B-4, B-14, and B-16. B-14 also contained concentrations of ethylbenzene, total xylenes, and naphthalenes that exceeded MTCA Method A cleanup levels.

Robinson Noble, Inc. concluded that because of the areal extent of soil and groundwater contamination at the Site,

“...additional investigation and remediation will be needed to achieve NFA status. Based on the currently available data, it is likely that final remediation efforts will involve excavation of impacted soils and treatment of impacted groundwater. Since it appears that the area of impacted soils extends below the convenience store and truck-fueling islands, the excavation will require demolition of these structures.” (Robinson Noble, 2013)

They further observe that there are several options for resolving groundwater impacts.

“These include additions of microbial degradation adjuvants (ORC-A®), air sparging/vapor extraction, air stripping or multi-technology treatment (ART in-well). Selection of the most appropriate technology is likely to depend not only on cost but treatment time.” (Robinson Noble, 2013)

1.2.4 Helium Test – 2014

On March 22, 2014, SME Solutions, LLC (SME), was retained to conduct a helium test of the Site's UST system and product lines associated with the UST system. The helium test indicated that a release point existed at the Tank #1 and Tank #2 CFN diesel USTs. The other three USTs or their turbine units failed in some capacity as well. The UST system product lines passed the helium test. The helium test determined that the UST nest area was a source of petroleum contamination for this Site.

Based on the results from Robinson Noble, Inc.'s Limited Phase II ESA, and the failure of the product lines during the helium gas test, AEG is recommending demolition of the structures including the convenience store, gasoline-range petroleum hydrocarbon pump islands, the diesel-range petroleum hydrocarbon truck pump islands, and the UST nest. Excavation will need to at least be conducted to the water table where ORC-A[®] can be spread to treat the area at the water table.

1.3 Site Geology and Hydrogeology

Regional Geology - According to the *Geologic Map of Washington, Southwest Quadrant*, the regional area is underlain by non-glacial age alluvium deposits and glacial Quaternary age undifferentiated outwash deposits and Vashon Till deposits (Walsh, T.J., Korosec, M.A., et al, 1987). The alluvium deposits typically consist of "silt, sand, gravel deposited in streambeds and fans". The undifferentiated outwash deposits typically consist of "recessional and pro-glacial stratified sand and gravel, locally contains silt and clay (a part of the Vashon Drift)". The till deposits typically consist of "unsorted highly compacted mixture of clay, silt, sand, and gravel" (Walsh, T.J., Korosec, M.A., et al, 1987).

Site Geology - According to Drost, B. W., G. L. Turney, N. P. Dion, and M. A. Jones in *Hydrology and Quality of Ground Water in Northern Thurston County, Washington* (1998), the Site is underlain by two aquifers, separated by glacial till. The shallow aquifer has been identified as Qvr, recessional outwash, and the deeper aquifer has been identified as Qva, advance outwash. Ecology describes the upper aquifer as extending downward to a depth of approximately 25 feet bgs. The glacial till ranges in thickness from one to 10 feet. The lower aquifer is at least 40 feet thick. The till retards the vertical flow of groundwater from the upper to the lower aquifer.

The Ecology Cleanup Action Plan (1992) states that the groundwater flows to the west during periods of high water, and flows to the northwest during periods of low water. The maximum seasonal variation of the water table in the upper aquifer is about nine feet. Saturated thickness varies from about 20 feet to about one foot. Linear groundwater flow rates vary from approximately 50 feet to 200 feet per year as determined by short duration constant rate pump tests.

Groundwater in the lower aquifer flows to the southwest. The maximum seasonal variation of the water table is about nine feet. Groundwater flow rates average from 20 feet to 60 feet per year as determined by rising head slug tests. Linear flow rates through the till range from 30 feet to .01 feet per year as determined by laboratory permeability tests.

Based on the subsurface investigation conducted by Robinson Noble, Inc. in November of 2013, (*Confederated Tribes of the Chehalis Reservation, 2729 93rd Avenue Southwest, Chehalis, Washington, Phase I and II Environmental Site Assessment*), subsurface soils at the Site generally consist of outwash deposits including silty sands with variable amounts of silt, sand, and occasional gravels. Similar material encountered in the upper portion of most of the borings suggests the upper two feet to eight feet of the Site has been modified. The silts, sands, and occasional gravels encountered in the lower portion of each boring appear to be native and are consistent with the Qvr described above. Groundwater was encountered in each of the on-Site borings at a depth of 17 feet bgs.

2.0 REMEDIAL ACTION OBJECTIVES (RAO) AND CLEANUP LEVELS

2.1 Remedial Action Objectives

Remedial action objectives (RAO) define the overall goals of the remedial effort and act as benchmarks for comparative evaluation of any remedial alternative. The RAOs are specific to each site and each of the contaminants and media affected at a site. The general RAOs for this Site are as follows:

2.1.1 Petroleum Hydrocarbon Impacted Soil

- Control and remove the potential for direct contact to humans and the environment from residual petroleum hydrocarbon contaminated soil and associated substances, and remediate the impacted soils to concentrations below Ecology MTCA Method A soil cleanup levels; and
- Reduce the potential for the soils to impact the groundwater via a dissolved phase of gasoline range petroleum hydrocarbon.

2.1.2 Petroleum Hydrocarbon Impacted Groundwater

- Remediate and restore the groundwater quality to concentrations below Ecology MTCA Method A groundwater cleanup levels, and minimize the potential for exposure to humans and the environment.

2.1.3 Overall Site Specific RAO

Based on the previous investigations and remedial actions, it has been determined that some contamination may remain at the Site and that the overall RAO at this Site is to achieve a **No Further Action (NFA) letter for the Site** from Ecology. The objective is to cleanup to below MTCA Method A standards so that an **Environmental Covenant will not be required**.

2.2 Cleanup Levels

MTCA defines cleanup levels as:

“...the concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions.”

These levels combined with the location where these cleanup levels must be met (point of compliance), and other regulatory requirements that apply to a site, make up the cleanup standards for a site. The MTCA regulations provide three options for establishing cleanup levels. These options are:

2.2.1 Method A Cleanup Levels

This is a method of determining cleanup levels that uses a table of cleanup levels that are protective of human health for 25 to 30 of the most common hazardous substances found in soil and groundwater. The MTCA Method A cleanup levels are designed for facilities undergoing routine cleanup actions that involve relatively few hazardous substances and for which numerical standards are available (WAC 173-340-700(5)(a)).

2.2.2 Method B Cleanup Levels

Method B cleanup levels are levels which are established using state and federal laws and a risk assessment process. This process is used where the contaminants found at a site are not listed in the Method A tables, or where there are many differing types of contaminants.

2.2.3 Method C Cleanup Levels

These cleanup levels are considered “*conditional cleanup levels*” and are determined using a method similar to the Method B cleanup levels, but use less stringent exposure assumptions. They are generally used at industrial sites or where Method A or B cleanup levels are lower than technically possible or where background concentrations of contaminants are above the Method A or B levels.

The conditions for using the MTCA Method A cleanup levels are met at this Site because numerical standards are available for all indicator hazardous substances in all media of concern (WAC 173-340-704(1)(b)). In addition, Method A cleanup levels are appropriate because only a few petroleum related hazardous substances have been found. Therefore, AEG is proposing that the MTCA Method A soil and groundwater cleanup levels be used at this Site. The proposed Method A cleanup levels are:

| <u>Media</u> | <u>Contaminant</u> | <u>Cleanup Level</u> |
|--------------|--------------------|------------------------------------|
| Soil: | TPH-Gasoline | 30 milligrams per kilogram (mg/kg) |
| | TPH-Diesel | 2,000 mg/kg |
| | Benzene | 0.03 mg/kg |
| | Toluene | 7 mg/kg |
| | Ethylbenzene | 6 mg/kg |
| | Total Xylenes | 9 mg/kg |

| <u>Media</u> | <u>Contaminant</u> | <u>Cleanup Level</u> |
|--------------|--------------------|----------------------|
| Groundwater: | TPH-Gasoline | 800 ug/l |
| | TPH-Diesel | 500 ug/l |
| | Benzene | 5 ug/l |
| | Toluene | 1,000 ug/l |
| | Ethylbenzene | 700 ug/l |
| | Total Xylenes | 1,000 ug/l |

2.3 Point of Compliance

Under MTCA, the point of compliance is the point or points at a site where the cleanup levels must be attained. The points of compliance for soil and groundwater are identified below.

2.3.1 Soil

The point of compliance for soil, as established under WAC 173-340-740(6), is as follows:

- For soil cleanup levels based on human exposure via direct contact, the point of compliance is:

“...throughout the Site from ground surface to 15 feet below the ground surface.”

- For sites where soil cleanup levels are based on the protection of groundwater:

“...the point of compliance is throughout the Site.”

MTCA recognizes that for some cleanup actions, the soil cleanup levels may not be met throughout a site (WAC 173-340-740(6)(f)). However, MTCA also recognizes that such cleanup actions may still comply with cleanup standards.

2.3.2 Groundwater

For groundwater, the standard point of compliance as established under WAC 173-340-720(8) is:

“...throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site.”

Ecology acknowledges that there are sites where it is not practicable to meet the cleanup level throughout the site or meet the cleanup level within a reasonable restoration time frame. Ecology allows for the establishment of a “conditional point of compliance”.

In establishing a conditional point of compliance, Ecology states that, with a couple of exceptions:

“...a conditional point of compliance that shall be as close as practicable to the source of hazardous substances ... not to exceed the property boundary.” (WAC 173-340-720(8)(c))

2.3.3 Proposed Site Specific Standard Point of Compliance

AEG has remediated an area around former monitoring well WDOE-6A which contained petroleum hydrocarbon constituents that exceeded MTCA Method A cleanup levels at depths shallower than 15 feet bgs. Ecology has conducted interim remedial actions that decreased TPH and BTEX on Site. AEG has excavated over 46.5 tons of contaminated soil and injected and/or placed over 975 pounds of ORC-A[®] at the Site. However, based on current soil and groundwater sampling and tank leak testing, it appears that contamination remains on the property. As a result, AEG is proposing additional remedial actions at the Site. These remedial actions are discussed in Section 3.0 of this Plan.

Because contamination may remain at the Site after completion of the remedial action, and the overall RAO at this Site is to achieve a **No Further Action (NFA) letter** from Ecology, AEG is proposing to establish and monitor a “*standard point of compliance*”. This point of compliance will be all areas of the Subject Site and may extend beyond the property’s legal boundaries.

3.0 PREVIOUS FEASIBILITY STUDIES

Ecology conducted two Feasibility Studies (FS) to evaluate alternatives to address contamination present on the Restover Site. The first was part of the Remedial Investigation (RI) was conducted by Golder Associates, Inc. (Golder) and was prepared by EnviroSphere and submitted November 18, 1985. This document was entitled “*Restover Truck Stop Feasibility Study, Interim Report on Development of Alternative Remedial Actions*”. A final document was prepared by Ecology and Environment, Inc. for Ecology, “*Final Feasibility Study Restover Truck Stop Olympia, Washington*”, dated October 1991.

Alternatives were developed for remediation of the Restover Site by first identifying the contaminated media. Remedial action objectives for the media of interest, soil and groundwater, were defined per MTCA cleanup levels. General response actions were developed to categorize applicable remedial technologies for each medium. Soil and groundwater remediation technologies were screened to select those most appropriate for application at Restover. The table shown below summarizes the media of interest, general response action, and remedial technologies evaluated during the final FS.

Summary of FS General Response Actions and Remedial Technologies, Restover Truck Stop, Olympia, Washington

| Medium of Interest | General Response Action | Remedial Technologies |
|--------------------|-------------------------------|--|
| Soil | Partial or Complete Removal | Excavation |
| | On-Site or Off-Site Disposal | On-Site or Off-Site Landfill |
| | Recycling | Asphalt Aggregate |
| | On-Site or Off-Site Treatment | Physical/Chemical Treatment Land Farming Bioremediation Thermal Treatment Incineration |
| | In-Situ Treatment | Vapor Extraction Bioremediation Soil Flushing |
| | No Action | Monitoring |
| Groundwater | On-Site or Off-Site Treatment | Physical/Chemical Air Stripping Carbon Adsorption Ultraviolet |

| | | |
|--------|------------------------------|--|
| | | Radiation/Oxidation Bioremediation |
| | In-Situ Treatment | Bioremediation |
| | On-Situ or Off-Site Disposal | POTW Surface Water Discharge Deep Well Injection |
| | No Action | Groundwater Monitoring |
| Debris | UST Removal | Excavation and Removal |
| | UST Abandonment | Abandon in Place |

From the table and evaluations, five alternatives were selected by Ecology. The following alternatives were considered appropriate for remediation of the Site:

- Alternative 1 – UST Removal, Soil Excavation and Off-Site Disposal, and Air-stripping Groundwater Treatment;
- Alternative 2 – UST Removal, Soil Excavation and On-Site Land Farming, and Air-stripping Groundwater Treatment;
- Alternative 3 – Vapor Extraction and Air-stripping Groundwater Treatment;
- Alternative 4 – In-Situ Bioremediation; and
- Alternative 5 – No Action with Monitoring.

Each remedial action alternative was evaluated based on six criteria:

- 1) Overall protection of human health and the environment and permanent reduction of toxicity, mobility, or volume through treatment;
- 2) Attainment of cleanup standards and compliance with ARARs;
- 3) Short-term effectiveness;
- 4) Long-term effectiveness;
- 5) Implementability; and
- 6) Cost.

Based on detailed analysis and comparison of the remedial action alternatives, Ecology selected Alternative 3 (Vapor Extraction and Air-Stripping Groundwater Treatment) for implementation at Restover. This alternative satisfied all evaluation criteria and cleanup goals and was technically feasible. In comparison with the other remedial action alternatives capable of meeting project cleanup goals (alternatives 1, 2, and 3), alternative 3 was the least costly, and therefore considered the most cost effective. This option was initiated in 1993 and terminated in

the fall of 1997, when it appeared that gasoline and BTEX concentrations had been reduced and it was no longer cost effective to operate the system. However, as shown above, the Site has not been completely remediated, and/or new releases have occurred.

4.0 PROPOSED REMEDIAL ACTIONS AND MONITORING

4.1 Proposed Remedial Actions

Because groundwater samples from monitoring well WDOE-6AR and from seven boreholes show that gasoline-range TPH and BTEX is present above the MTCA Method A cleanup levels, and because PCS was observed in three boreholes and the bottom of the excavation conducted as part of the 2013 Interim Remedial Action, additional remedial actions are proposed to take place. In addition, the helium tank leak tests indicate that there is still a source of contamination present at the property and contributing to the Site's contamination. The additional remedial actions considered by AEG include:

- Additional excavation;
- Monitored natural attenuation;
- In-situ chemical oxidation (ISCO) using RegenOx[®] or ORC-A[®];
- Enhanced bioremediation using ORC-A[®]; and
- A combination of ISCO, enhanced bioremediation, and monitored natural attenuation.

The remedial actions chosen are a combination of excavation, enhanced bioremediation, and monitored natural attenuation to address the soil and groundwater throughout the Site. Excavation would be conducted to remove soil contamination and would address the areas beneath the convenience store, gasoline-dispenser canopy area, UST nest, and the truck diesel dispensers (Figure 4, *Excavation and Soil Contaminated Area Site Map*). This encompasses an area of approximately 9,600 square feet.

Soils from 0 feet to 5 feet bgs have exhibited no signs of contamination during Site investigations, and therefore could be stockpiled and used later for backfill. The volume of soils excavated from 0 feet to 5 feet bgs is approximately 48,000 ft³ or 1,778 cubic yards (yd³) or greater than 2,666 tons.

Soils from 5 feet bgs to the water table or approximately 16 feet to 17 feet bgs would be excavated for off-Site disposal. The volume of soils to be excavated using the 16 feet depth would be approximately 105,600 ft³ or 3,911 yd³. Assuming 1.5 tons per cubic yard, this would represent approximately 5,867 tons. A cost of \$100/ton for excavation, loading, transporting, and disposing of the PCS would result in an estimated cost of \$586,700 for excavating this area.

Once the groundwater is exposed, ORC-A[®] would be spread throughout the bottom of the excavation to enhance the bioremediation process. The remedial actions chosen were based on the following considerations:

- The remedial action objectives for the Site;
- Feasibility analyses (a combination of alternative 1 [UST Removal, Soil Excavation and Off-Site Disposal with no air-stripping] and alternative 4 [In-Situ Bioremediation] from the 1991 FS);
- The State of Washington and Tribal Trust Regulatory requirements; and
- The Site's retail operation.

Using the other remedial options alone would not allow the RAOs for the Site to be met. The primary components of the chosen remedial actions are as follows:

- **Contaminated Soil Excavation**

Excavation and disposal of contaminated soil from a depth of approximately 5 feet bgs to 16 feet or 17 feet bgs.

- **Enhanced In-Situ Bioremediation**

Following the excavation and soil removal, Oxygen Reducing Compound–Advanced (ORC-A[®]) will be applied to the exposed groundwater in the bottom of the excavation.

According to Regenesys, ORC-A[®] is:

“...a proprietary formulation of food-grade, calcium oxy-hydroxide that produces a controlled-release of molecular oxygen for periods of up to 12 months upon hydration...”

The oxygen released will:

“...accelerate the rate of naturally occurring aerobic contaminant biodegradation in groundwater and saturated soils for periods of up to 12 months...”

- **Monitored Natural Attenuation**

If the use of ORC-A[®] does not remediate the remaining contaminants to below the MTCA Method A cleanup levels, it is anticipated that over time, natural attenuation will do so. Natural attenuation is the reduction in concentration of compounds in soil or groundwater over time, and/or distance from the source due to naturally occurring physical, chemical, and biological processes, such as biodegradation, dispersion, dilution, adsorption, and volatilization.

4.2 Compliance Monitoring of Groundwater

MTCA identifies three types of compliance monitoring to be performed during and/or after a remedial action,

- Protection monitoring;
- Performance monitoring; and
- Confirmational monitoring.

According to MTCA:

Protection monitoring confirms:

“...that human health and the environment are adequately protected during construction and the operation and maintenance period of an interim action or cleanup action...”

Performance monitoring confirms:

“...that the interim action or cleanup action has attained cleanup standards and, if appropriate, remediation levels...”

Confirmational monitoring confirms:

“...the long-term effectiveness of the interim action or cleanup action once cleanup standards and, if appropriate, remediation levels or other performance standards have been attained.”

During and following the remedial actions being taken at the Site, all three types of compliance monitoring will occur.

4.2.1 Performance Monitoring

Performance Monitoring will occur during and after the application of the ORC-A[®]. This monitoring will monitor the effectiveness of the in-situ enhanced bioremediation from the ORC-A[®]. It will also assist in determining if the ORC-A[®] is still active at the Site. The Performance Monitoring will also monitor the natural attenuation of the residual contaminants after the ORC-A[®] is no longer active at the Site.

The wells to be used for the Performance Monitoring are the one existing monitoring well WDOE-6AR, and seven new wells to be installed at the Site (MW-1 through MW-7). The new wells are required to monitor portions of the Site that appear not to be monitored based on historical groundwater flow directions. Ecology reports historical groundwater movement to the west and northwest in the shallow aquifer.

One of the newly installed wells (MW-1) will be installed adjacent to the UST nest that will be removed during the excavation process. Two wells, MW-2 and MW-3, will be installed adjacent to the west end of the diesel dispenser area and north of the gasoline dispenser area. Well MW-4 will be installed southwest of the convenience store to detect any movement in that direction. Monitoring wells MW-5 through MW-7 will be installed to the northwest of the diesel fuel islands, south of the gasoline dispenser area, and in the area of the 2013 Robinson Noble boring B-14, which contained high concentrations of gasoline-range petroleum hydrocarbons in the groundwater. Figure 5, *Excavation and Groundwater Plume Area Map*, shows the locations of the proposed wells.

The Performance Monitoring wells will be sampled on a quarterly basis until the ORC-A[®] is no longer active at the Site, and the contaminant concentrations are below the MTCA Method A cleanup levels. It is anticipated that sampling will occur for at least four quarters.

Groundwater samples for the first year of quarterly sampling events will be analyzed for gasoline-range organics as per MTCA Cleanup Regulation Table 830-1, *Required Testing for Petroleum Releases*. The analyses would include:

- Gasoline-range TPHs by Northwest Method NWTPH-Gx;
- Volatile organic compounds (VOCs) including:
 - benzene, toluene, ethylbenzene, total xylenes (BTEX);
 - methyl tertiary-butyl ether (MTBE);
 - total naphthalenes;
 - 1-2 dibromoethane (EDB); and
 - 1-2 dichloroethane (EDC) via EPA Method 8260C;
- Diesel-range TPH by Northwest Method NWTPH-Dx/Dx extended;
- Total lead via EPA Method 7421; and
- Carcinogenic polynuclear aromatic hydrocarbons (cPAH) via EPA Method 8270D.

In addition, groundwater field parameters of temperature, pH, conductivity, dissolved oxygen, and oxygen reducing potential will be measured to assist in determining when the RegenOx and the ORC-A[®] are no longer active at the Site.

4.2.2 Confirmation Monitoring

Once contaminant concentrations have been remediated to below the MTCA Method A cleanup levels at the point of compliance as observed by the Performance Monitoring, Confirmation Monitoring will begin. This monitoring will confirm that the remedial actions have performed as expected and confirm that the groundwater is below, and does not increase above, the cleanup standards set for the Site.

The wells used for the Confirmation Monitoring are the same wells used for the performance monitoring. It is anticipated that this sampling will occur for at least four additional quarters.

The samples collected from the wells during this monitoring will be analyzed for:

- Gasoline-range TPHs by Northwest Method NWTPH-Gx;
- Volatile organic compounds (VOCs) including BTEX via EPA Method 8021B;
- Diesel-range TPH by Northwest Method NWTPH-Dx/Dx extended (if found during the Performance Monitoring); and
- Any of the other constituents observed during Performance Monitoring.

If the four consecutive quarters of Confirmation Monitoring do not show contaminant concentrations greater than the MTCA Method A cleanup levels, AEG will request an NFA determination from Ecology.

4.2.3 Protection Monitoring and Reporting

Concurrent with the Performance Monitoring and the Confirmation Monitoring, Protection Monitoring will occur. This monitoring will confirm that contamination, if present, is not leaving the property. However, because of the requirements of Indian Trust Land, no contamination should be left on the property. In addition, the Restrictive Covenant that is present on the property will need to be removed. This monitoring will need to document that no contamination is present on the property. Therefore, at the time that a request is made that Ecology provide a “*No Further Action*” (NFA) opinion letter, a request will also be made to remove the restrictive covenant. This monitoring will use all wells on Site and will follow the analytical protocols of the specific monitoring program.

As part of the Protection Monitoring program, *Quarterly Sampling Event Reports* will be prepared, documenting the depth-to-water and groundwater flow direction, and summarizing analytical results of the groundwater monitoring/sampling activities and any other activities pertinent to the cleanup at the Site. All reports generated by AEG will be reviewed by a Washington State licensed hydrogeologist. All data generated will be submitted to Ecology in accordance with WAC 173-340-840(5) in both written and electronic format.

5.0 LIMITATIONS

This Corrective Action Plan was prepared pursuant to the services authorized under our agreement. It has been prepared using generally accepted professional practices, related to the nature of the work accomplished. This plan was prepared for the exclusive use of the Restover Truck Stop, or its 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 plan, 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.

6.0 REFERENCES

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

Associated Environmental Group, LLC, 2012. In-Situ Bioremediation – Remedial Action Restover Truck Stop, 2725 – 93rd Avenue SW, Olympia, Washington

Associated Environmental Group, LLC, 2013. Remedial Action – Soil Excavation, Groundwater Monitoring Well Installation, and Sampling Letter Report Restover Truck Stop, 2725 – 93rd Avenue SW, Olympia, Buckley, Washington

ASTM Standard EE 1689 – 95 (Reapproved 2008), Standard Guide for Developing Conceptual Site Models for Contaminated Sites

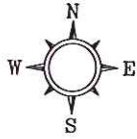
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U.S. Geological Survey, 1998, Drost, B. W., G. L. Turney, N.P. Dion, and M.A. Jones, *Hydrology and Quality of Ground Water in Northern Thurston County, Washington*, Report 92-4109 [Revised]

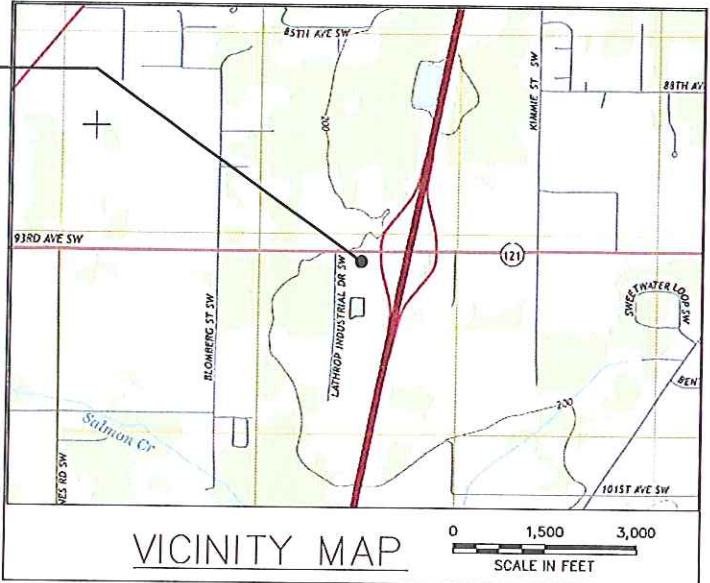
Walsh, T.J., Korosec, M.A., et al, 1987, *Geologic Map of Washington, Southwest Quadrant*, Washington Division of Geology and Earth Resources Geologic Map GM-34

Washington State Department of Ecology, October 1991, *Final Feasibility Study Restover Truck Stop, Olympia, Washington*, Document Control Number WD5060.1.0

FIGURES AND TABLES



PROJECT LOCATION

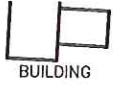


NOTES

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--2013, 7.5 MINUTE QUADRANGLE MAP MAYTOWN, WASHINGTON



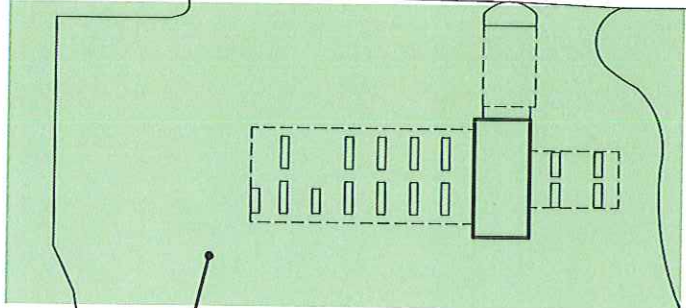
BUILDING

BUILDING

BUILDING

93rd AVENUE SW

LATHROP INDUSTRIAL DRIVE SW



PROJECT SITE- SHADED AREA DENOTES PROPERTY LIMITS

BUILDING

BUILDING



ASSOCIATED ENVIRONMENTAL GROUP, LLC
 605 11TH Avenue, SE, Suite 201
 Olympia, WA 98501
 (360) 352-9835 Fax (360) 352-8164

FIGURE 1
SITE AND VICINITY MAP

RESTOVER TRUCK STOP

2725 93rd AVENUE SW
 OLYMPIA, WASHINGTON

Project #: 12-116
 File: 12-116_1402.DWG

Date: April 18, 2014
 Sheet: 1 OF 2

93rd AVENUE SW



LEGEND

SIGN

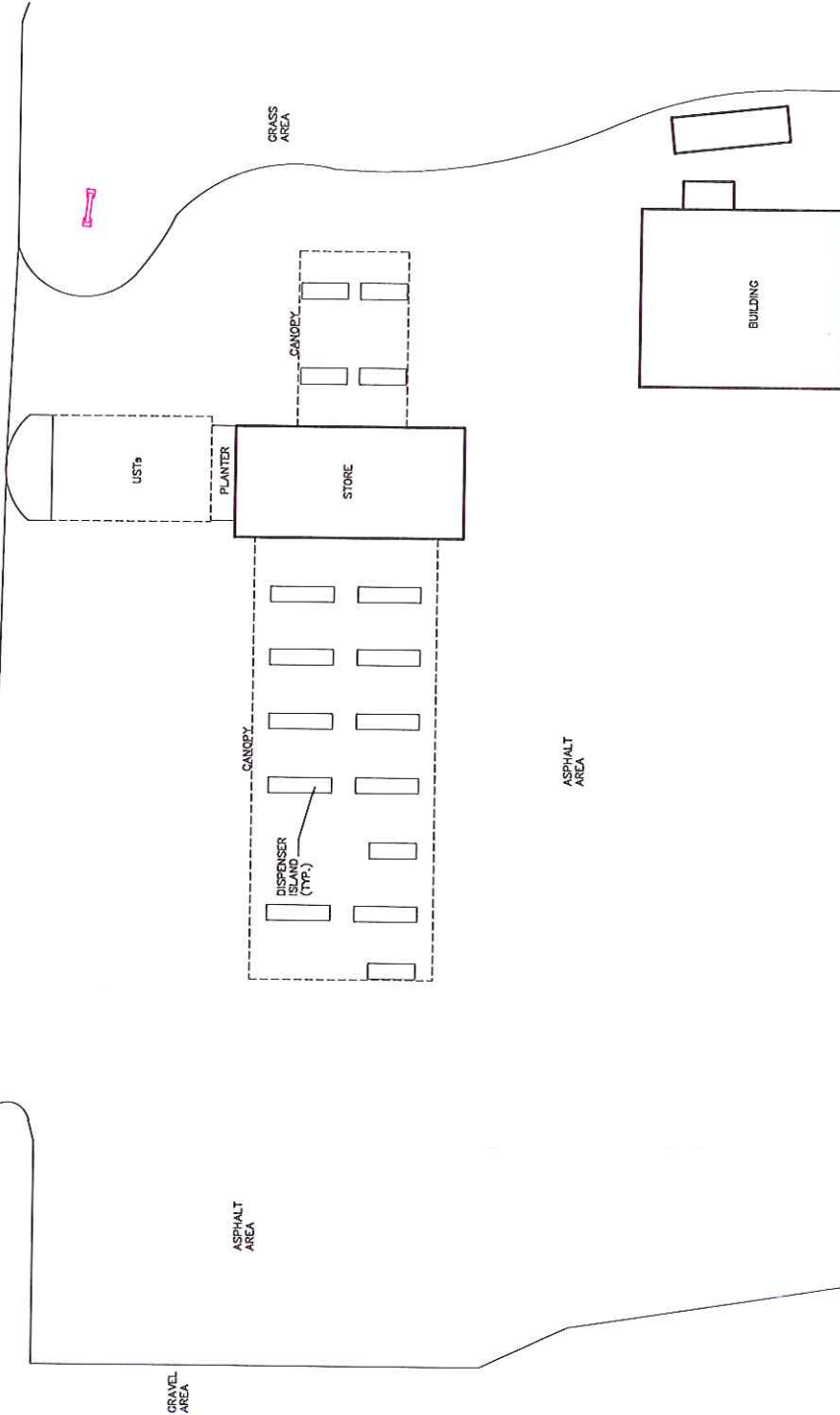


NOTES

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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEC, LLC. VISUAL INTERPRETATION OF AERIAL SURVEY-2013, 7.5 MINUTE QUADRANGLE MAP, MAYTOWN, WASHINGTON.



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FIGURE 2
SITE MAP

RESTOVER TRUCK STOP
 2725 93rd AVENUE SW
 OLYMPIA, WASHINGTON

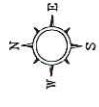
Project #: 12-116

Date: June 11, 2014

File: 12-116_14Q2 (3).DWG

Sheet: 2 OF 2

93rd AVENUE SW



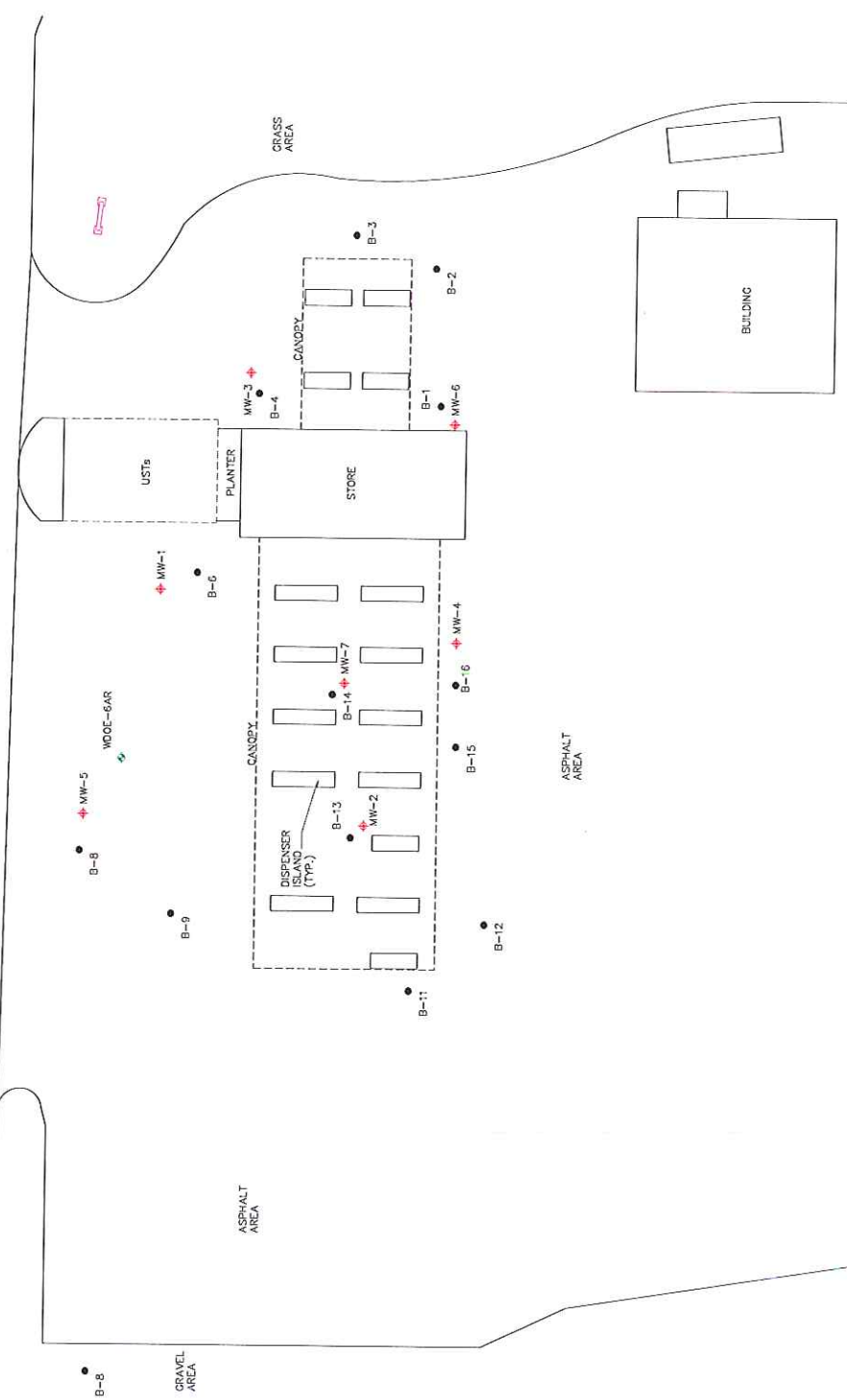
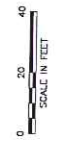
- LEGEND**
- MW-1 PROPOSED GROUNDWATER MONITORING WELL
 - WIDE-GAR GROUNDWATER MONITORING WELL
 - B-1 SOIL BORING LOCATION
 - SIGN

NOTES

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REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEC, LLC, WASHINGTON STATE DEPARTMENT OF ECOLOGICAL SURVEY-2013. 7.5 MINUTE QUADRANGLE MAP, MAYTOWN, WASHINGTON



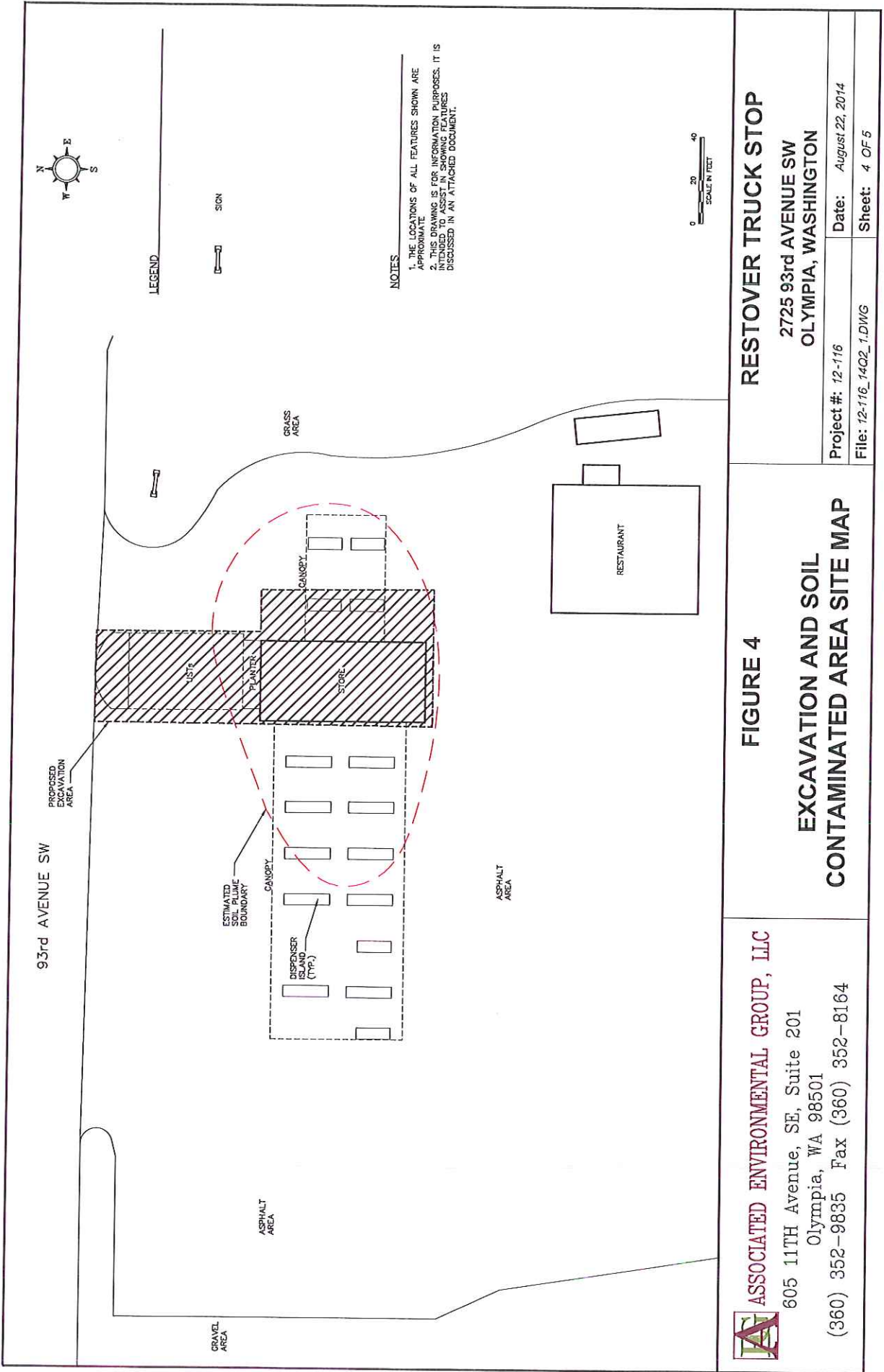
AEI ASSOCIATED ENVIRONMENTAL GROUP, LLC
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FIGURE 3
SITE DIAGRAM with BORING AND MONITORING WELL LOCATIONS

RESTOVER TRUCK STOP
 2725 93rd AVENUE SW
 OLYMPIA, WASHINGTON

Project #: 12-116
 File: 12-116_14Q2 (3).DWG

Date: June 11, 2014
 Sheet: 2 OF 2

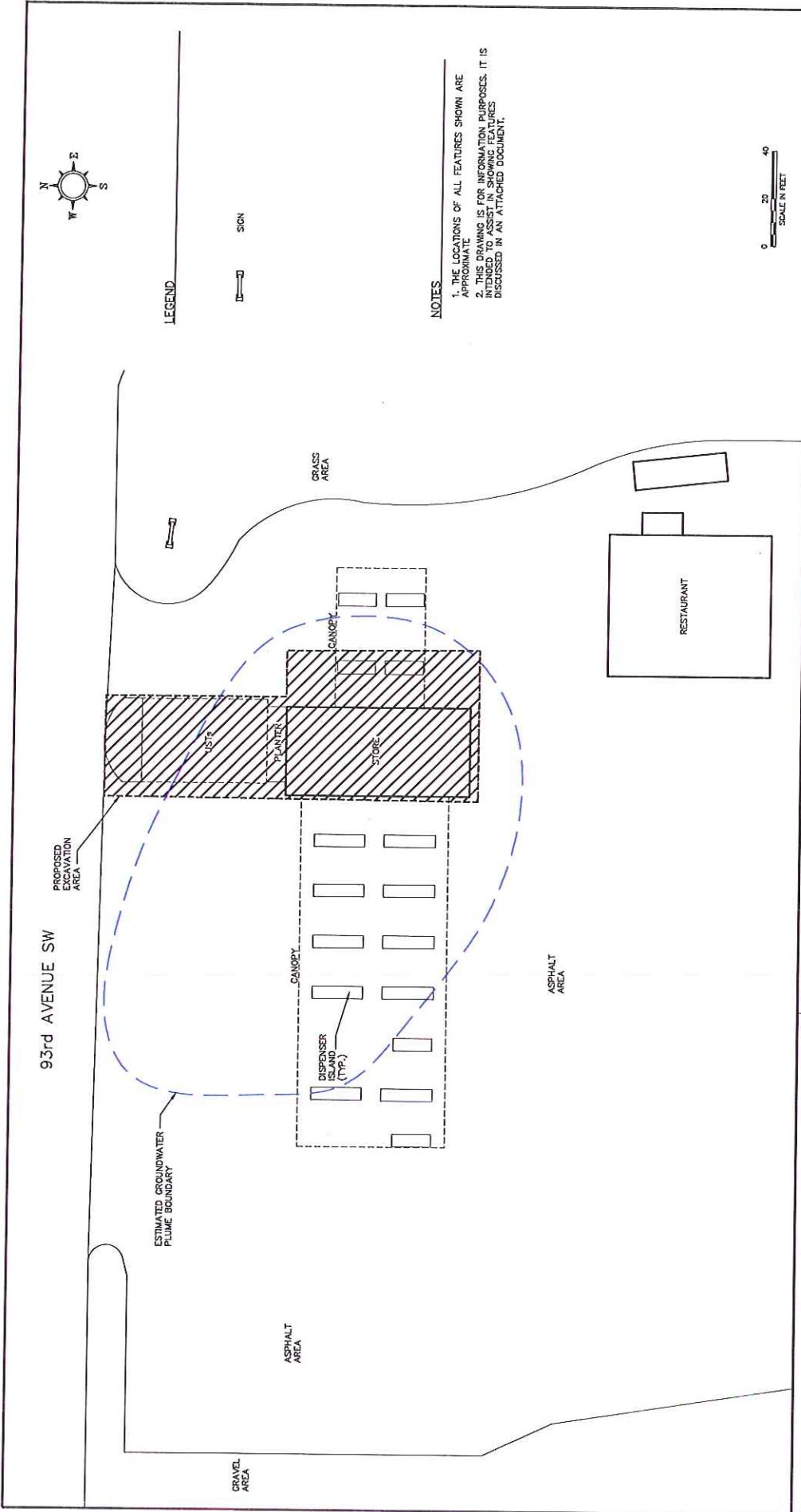


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FIGURE 4
EXCAVATION AND SOIL
CONTAMINATED AREA SITE MAP

RESTOVER TRUCK STOP
 2725 93rd AVENUE SW
 OLYMPIA, WASHINGTON

Project #: 12-116 Date: August 22, 2014
 File: 12-116_14Q2_1.DWG Sheet: 4 OF 5



93rd AVENUE SW

PROPOSED EXCAVATION AREA

ESTIMATED GROUNDWATER PLUME BOUNDARY

GRAVEL AREA

ASPHALT AREA

GRASS AREA

CANOPY

CANOPY

USFR

PLANTER

STORE

DISPENSER ISLAND (TYP.)

RESTAURANT

LEGEND

SIGN

NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS NOT TO BE USED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

0 20 40
SCALE IN FEET

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FIGURE 5
EXCAVATION AND GROUNDWATER PLUME AREA MAP

RESTOVER TRUCK STOP
 2725 93rd AVENUE SW
 OLYMPIA, WASHINGTON

Project #: 12-116 Date: August 22, 2014
 File: 12-116_14Q2_1.DWG Sheet: 5 OF 5

Table 1 Summary of Groundwater Analytical Results
Restover Truck Stop
Olympia, WA

| Well Number ¹ | Date Sampled | Gasoline TPH ² (ug/L) | Select Volatile Organic Compounds ³ (ug/L) | | | | BTEX ⁵ (ug/L) |
|---------------------------------------|------------------|-------------------------------------|---|---------|--------------|---------------|-----------------------------|
| | | | Benzene | Toluene | Ethylbenzene | Total Xylenes | |
| WDOE-6A | February-97 | 9,900 | 16 | 14 | 61 | 219 | -- |
| | August-97 | 9,010 | 8 | 11 | 44 | 156 | -- |
| | February-98 | 4,500 | 20 | 40 | 34 | 126 | -- |
| | January-99 | 7,900 | 29 | 15 | 76 | 300 | -- |
| | January-00 | 7,300 | 17 | 7.8 | 53 | 160 | -- |
| | 2/5/2002 | 6,500 | 19 | 9 | 69.0 | 159.0 | 255 |
| | 10/3/2005 | 3,400 | 5.5 | 1.3 | 14.4 | 23.4 | -- |
| | 3/16/2012 | 1,800 | <1 | <1 | 1.6 | 2.3 | -- |
| | 11/13/2012 | 2,200 | 2.4 | 3.2 | 11.4 | 15.0 | -- |
| | 2/12/2013 | 3,600 | 15.6 | 10.4 | 19.5 | 35.9 | -- |
| WDOE-6ARW | 4/29/2013. | 5,900 | <1 | <2 | 4.89 | 14.2 | -- |
| | 7/29/2013 | 800 | 1.3 | 3.3 | 2.1 | 8.2 | -- |
| | 9/18/2013 | 506 | <1 | <2 | 2.4 | 10.1 | -- |
| | 10/23/2013 | 980 | 1 | <2 | 4.9 | 3.5 | -- |
| | 11/8/2013 | 680 | 1.2 | <2 | 1.6 | <2 | -- |
| | 2/12/2014 | 796 | <1.0 | <2.0 | <1.0 | <2.0 | -- |
| | PQL | 100 | 1 | 2 | 1 | 2 or 3 | -- |
| Ecology MTCA Method A Clean Up Levels | 800 ⁴ | 5 | 1,000 | 700 | 1,000 | -- | |

Notes:

- ¹ Approximate monitoring well location is shown in Figure 2
- ² Gasoline range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Gx
- ³ Select Volatile Organic Compounds (VOC). Analyzed by EPA Method 8021B.
- ⁴ Cleanup level with presence of benzene
- ⁵ VOC data from Ecology reports. VOCs were reported as a combined BTEX value. Note: Data from 1997 to 2005 from Ecology reports. ug/L= micrograms per liter
- MTCA = Model Toxics Control Act
- PQL=Practical Quantitation Limits
- = not analyzed for this constituent
- < = not detected above laboratory limits
- * Ecology has not designated a MTCA Method A cleanup level for this constituent
- Bold red** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Table 2 - Summary of Soil Analytical Results - Environmental Site Assessment (ESA)
Data from Robinson Noble subsurface investigation; Report 2214-020A, Table 1
Restover Truck Stop
Olympia, WA**

| Sample Number | Depth (feet) | Gasoline (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | Napthalenes (mg/kg) | 1,3,5 Trimethylbenzene (mg/kg) |
|---------------|--------------|------------------|-----------------|-----------------|----------------------|-----------------|---------------------|--------------------------------|
| B1-7 | 7 | 29 | nd | nd | 0.068 | 0.52 | 0.053 | 0.25 |
| B1-16 | 16 | 135 | nd | nd | <6 | 0.2 | 0.13 | 0.13 |
| B2-12 | 12 | nd | nd | nd | nd | nd | nd | nd |
| B3-16 | 16 | nd | nd | nd | nd | nd | nd | nd |
| B4-10 | 10 | 42,500 | 16.2 | 237 | 468 | 2,730 | 187 | 378 |
| B5-16 | 16 | nd | nd | nd | nd | nd | nd | nd |
| B6-16 | 16 | nd | nd | nd | nd | nd | 0.17 | nd |
| B7-16 | 16 | nd | nd | nd | nd | nd | nd | nd |
| B8-15 | 15 | nd | nd | nd | nd | nd | nd | nd |
| B9-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B10-16 | 16 | nd | nd | nd | nd | nd | nd | nd |
| B11-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B12-16 | 16 | nd | nd | nd | nd | nd | nd | nd |
| B13-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B14-8 | 8 | nd | 0.19 | 0.06 | nd | 0.14 | nd | nd |
| B15-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B16-7 | 7 | nd | nd | nd | nd | nd | 0.082 | nd |
| B17-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B18-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| B19-8 | 8 | nd | nd | nd | nd | nd | nd | nd |
| MTCA Method A | | 30 | 0.03 | 7 | 6 | 9 | 160 | NE |

Notes:

Bolded Red values indicate the result exceeds the MTCA Method A cleanup level

"NE" denotes standard Method A or B cleanup level not established.

"nd" indicates the analyte was not detected above the applicable laboratory detection limit

MTCA = Model Toxics Control Act

Table 3 - Summary of Groundwater Analytical Results - Phase II ESA
Data from Robinson Noble subsurface investigation; Report 2214-020A, Table 2
Restover Truck Stop
Olympia, WA

| Sample Number | Gasoline (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Xylenes (µg/L) | Napthalenes (µg/L) | 1,3,5 Trimethylbenzene (µg/L) |
|---------------|-----------------|----------------|----------------|---------------------|----------------|--------------------|-------------------------------|
| B1-W | 3,230 | 47 | 2.1 | 91 | 127 | 15 | 18 |
| B2-W | nd | nd | nd | nd | nd | nd | nd |
| B3-W | nd | nd | nd | nd | nd | nd | nd |
| B4-W | 538 | 18 | nd | 4.7 | 14 | 1.7 | 1 |
| B5-W | nd | nd | nd | nd | nd | nd | nd |
| B6-W | 1,023 | 1.1 | nd | nd | nd | nd | nd |
| B7-W | nd | nd | nd | nd | 0.15 | nd | nd |
| B8-W | 1,280 | nd | 1.4 | 12.6 | 3.1 | nd | 2.8 |
| B9-W | 358 | nd | 1 | 2.4 | 15.7 | 1.2 | 2.8 |
| B10-W | nd | nd | nd | nd | nd | nd | nd |
| B11-W | nd | nd | nd | nd | nd | nd | nd |
| B12-W | nd | nd | nd | nd | nd | nd | nd |
| B13-W | 1,350 | nd | nd | 8.8 | 42 | 2.7 | 20 |
| B14-W | 18,000 | 11 | 496 | 891 | 2,710 | 236 | 171 |
| B15-W | 105 | nd | nd | nd | nd | nd | nd |
| B16-W | 842 | 5.3 | 1.6 | 55 | 66 | 10 | nd |
| B17-W | nd | nd | nd | nd | nd | nd | nd |
| B18-W | nd | nd | nd | nd | nd | nd | nd |
| B19-W | nd | nd | nd | nd | nd | nd | nd |
| MTCA Method A | 800 | 5 | 1,000 | 700 | 1,000 | 160 | 80* |

Notes:

Bolded values indicate the result exceeds the MTCA Method A or Method B cleanup level

* Denotes MTCA Method B non-carcinogenic standard formula value

"nd" indicates the analyte was not detected above the applicable laboratory detection limit

MTCA = Model Toxics Control Act

APPENDIX A

TANK LEAK TEST RESULTS - HELIUM



SME SOLUTIONS, LLC

6015 E Valleyway Ave
Spokane, WA 99212
(253) 572-3822

2302 A Street
Tacoma, WA 98402
(253) 572-3822

2800 NW 31st Ave
Portland, OR 97210
(503) 946-0000

PRESSURE TEST DATA CHART

Customer Restover Truck Stop

Date Mar 22, 2014

Address 2725 92nd Ave SW

Olympia WA

| IDENTIFY EACH ITEM TESTED | TIME (MILITARY) | LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC. | PRESSURE | | TEST RESULTS CONCLUSIONS, REPAIRS, AND COMMENTS |
|---------------------------|-----------------|--|----------|--------|---|
| | | | BEFORE | AFTER | |
| Premium | 1030 | Start Test | | 40 PSI | |
| Line | 1045 | 1st Reading | | 40 PSI | |
| | 1100 | 2nd Reading | | 40 PSI | |
| | 1115 | 3rd Reading | | 40 PSI | |
| | 1130 | 4th Reading | | 40 PSI | |
| | | Stop Test | | 40 PSI | Test Passed |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Test Required By: _____

Testers Name: Mike Wertz

Testers Signature: _____ Date: Mar 22, 2014



SME SOLUTIONS, LLC

6015 E Valleyway Ave
Spokane, WA 99212
(253) 572-3822

2302 A Street
Tacoma, WA 98402
(253) 572-3822

2800 NW 31st Ave
Portland, OR 97210
(503) 946-0000

PRESSURE TEST DATA CHART

Customer Restover Truck Stop Date Mar 22, 2014
Address 2725 92nd Ave SW
Olympia WA

| IDENTIFY EACH ITEM TESTED | TIME (MILITARY) | LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC. | PRESSURE | | TEST RESULTS CONCLUSIONS, REPAIRS, AND COMMENTS |
|---------------------------|-----------------|--|----------|-------|---|
| | | | BEFORE | AFTER | |
| Tank 1 Diesel | 1000 | Start Test | | 8" WC | |
| | 10:03 | Stop Test | | 0" WC | Did not Pass |
| | | | | | |
| | | | | | |
| Tank2 CFN | 1100 | Start Test | | 8" WC | |
| | 1105 | Stop Test | | 0" WC | Did not Pass |
| | | | | | |
| | | | | | Tanks 3, 4,5 Unable to Test. Cannot isolate |
| | | | | | From the system. |
| | | | | | Tank 4 Also has a stuck drop tube |
| | | | | | |

Test Required By: _____

Testers Name: Mike Wertz

Testers Signature: _____ Date: Mar 22, 2014



SME SOLUTIONS, LLC

6015 E Valleyway Ave
Spokane, WA 99212
(253) 572-3822

2302 A Street
Tacoma, WA 98402
(253) 572-3822

2800 NW 31st Ave
Portland, OR 97210
(503) 946-0000

PRESSURE TEST DATA CHART

Customer Restover Truck Stop Date Mar 22, 2014
Address 2725 92nd Ave SW
Olympia WA

| IDENTIFY EACH ITEM TESTED | TIME (MILITARY) | LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC. | PRESSURE | | TEST RESULTS CONCLUSIONS, REPAIRS, AND COMMENTS |
|---------------------------|-----------------|--|----------|--------|---|
| | | | BEFORE | AFTER | |
| UNL Line | 1030 | Start Test | | 40 PSI | |
| | 1045 | 1st Reading | | 40 PSI | |
| | 1100 | 2nd Reading | | 40 PSI | |
| | 1115 | 3rd Reading | | 40 PSI | |
| | 1130 | 4th Reading | | 40 PSI | |
| | | Stop Test | | 40 PSI | Test Passed |
| | | | | | |
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Test Required By: _____
Testers Name: Mike Wertz
Testers Signature: _____ Date: Mar 22, 2014



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SPILL BUCKET TESTING FORM

Date: 3/22/14

Site/Business Name: Restover Truck Stop Site ID: _____

Site Address: 2725 92nd Ave SW

Street

Olympia WA

City

State

Zip+4 (Required)

Fill Buckets

| PRODUCT | TEST RESULTS | | | REPAIRED TODAY ? | | |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | PASS | FAIL | N/A | YES | NO | N/A |
| Diesel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Diesel CFN | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regular | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Diesel | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Super | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Vapor Buckets

| PRODUCT | TEST RESULTS | | | REPAIRED TODAY ? | | |
|---------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | PASS | FAIL | N/A | YES | NO | N/A |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Temporary Fix ?

Comments:

[Empty box for comments]

Technician: Mike Wertz Signature: _____



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SPILL BUCKET TESTING FORM

Date: 3/22/14

Site/Business Name: Restover Truck Stop Site ID:

Site Address: 2725 92nd Ave SW
Street
Olympia WA
City State Zip+4 (Required)

Fill Buckets

Table with columns: PRODUCT, TEST RESULTS (PASS, FAIL, N/A), REPAIRED TODAY? (YES, NO, N/A). Rows include Diesel Sump, CFN Sump, UNL Sump, Diesel Sump, and PRE Sump.

Vapor Buckets

Table with columns: PRODUCT, TEST RESULTS (PASS, FAIL, N/A), REPAIRED TODAY? (YES, NO, N/A). Multiple empty rows for data entry.

Temporary Fix ?

Comments:

This form is for the turbine sumps on site. The CFN turbine sump was not tested because the DW boot on the Flexible product pipe was missing and there was no way to isolate it

Technician: Mike Wertz Signature:



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PRESSURE TEST DATA CHART

Customer Restover Truck Stop Date Mar 21, 2014
Address 2725 92nd Ave SW
Olympia WA

| IDENTIFY EACH ITEM TESTED | TIME (MILITARY) | LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC. | PRESSURE | | TEST RESULTS CONCLUSIONS, REPAIRS, AND COMMENTS |
|---------------------------|-----------------|--|----------|--------|---|
| | | | BEFORE | AFTER | |
| CFN Line | 0900 | Start Test | | 40 PSI | |
| | 0915 | 1st Reading | | 40 PSI | |
| | 0930 | 2nd Reading | | 40 PSI | |
| | 0945 | 3rd Reading | | 40 PSI | |
| | 1000 | 4th Reading | | 40 PSI | |
| | | Stop Test | | 40 PSI | Test Passed |
| | | | | | |
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Test Required By: _____
Testers Name: Mike Wertz
Testers Signature: _____ Date: Mar 21, 2014



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|---------------------------|-----------------|--|----------|--------|---|
| | | | BEFORE | AFTER | |
| Diesel Line | 0830 | Start Test | | 40 PSI | Tested the Diesel lines from Tanks 1 & 4 |
| | 0845 | 1st Reading | | 40 PSI | Together as 1 Line |
| | 0900 | 2nd Reading | | 40 PSI | |
| | 0915 | 3rd Reading | | 40 PSI | |
| | 0930 | 4th Reading | | 40 PSI | |
| | | Stop Test | | 40 PSI | Test Passed |
| | | | | | |
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Test Required By: _____
Testers Name: Mike Wertz
Testers Signature: _____ Date: Mar 22, 2014



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|---------------------------|-----------------|--|----------|--------|---|
| | | | BEFORE | AFTER | |
| Diesel Retail | 1030 | Start Test | | 40 PSI | |
| Line | 1045 | 1st Reading | | 40 PSI | |
| | 1100 | 2nd Reading | | 40 PSI | |
| | 1115 | 3rd Reading | | 40 PSI | |
| | 1130 | 4th Reading | | 40 PSI | |
| | | Stop Test | | 40 PSI | Test Passed |
| | | | | | |
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Testers Name: Mike Wertz

Testers Signature: _____ Date: Mar 22, 2014