

# **Remedial Investigation Report**

Duvall Market 15820 (15802) Main Street Northeast Duvall, Washington 98019 Facility/Site No.: 7646431

**VCP No.: NW0995** 

# **Prepared For:**

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Attachment A - Site Photographs

Attachment B – 2002 WT Services – Independent Cleanup Action Report (with map from Ecology file)

Attachment C - 2008 HWA - Main Street Reconstruction Report

Attachment D - 2013 Global 2000 - Phase I ESA

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### 1.0 INTRODUCTION

Kane Environmental, Inc. (Kane Environmental) has conducted Limited and Supplemental Phase II Environmental Site Assessments (ESA), including sampling of soil and groundwater on the Duvall Market Property at 15820 Main Street Northeast, in Duvall, Washington (the Property), and in the City of Duvall right-of-way (ROW) adjacent to the Property to the west. This report includes current data collected in 2016, previous data reported in a Limited Phase II ESA report for the Property completed by Kane Environmental dated April 7, 2015, as well as prior work completed on the Property in 2002 and 2008. The Property vicinity is displayed in Figure 1.

# 1.1 Background Information

<u>Property Description</u>. The entire Property is located in north Duvall, Washington along the east side of Main Street NE, north of NE Stewart Street and south of NE Virginia Street in the NW quarter Section of Section 13 Township 26 Range 6, King County, Washington. According to Google Earth, the GPS coordinates of the Property are: Latitude 47.7425, Longitude -121.9855. Refer to Figure 1 for a general location.

The entire property consists of three parcels of land (213070-0470, 213070-0460, and 213070-0445) comprising Lots 9 thru 16 inclusive. The entire Property includes the addresses of 15802 and 15820 Main Street NE. According to the King County Department of Assessments, all three parcels included in the Property are owned by YHC Enterprises Corp. Mr. Ted Yi is a representative for the Property ownership group. The Property is zoned Old Town – Mixed Use by the City of Duvall. The improvements on the north half of the Property (15820 Main) consist of a single split level 6,744 sq ft building in a mixed land use zone. The building currently is used as a convenience store, restaurant, and salon.

According to a 2013 Phase I ESA for the Property (Attachment D), the Property was developed and platted by 1917, with indications of automotive fueling in the southwest corner of the Property by 1930. The original structures had been replaced by 1950 with a structure related to the fueling operation. In 1970 the Property appeared to be vacant, with the current retail and restaurant structure constructed in 1974.

The <u>south half of the Property</u> is the <u>subject of this report</u> because the decommissioned underground fuel storage tanks (USTs) were situated near the extreme southwest corner of the Property. This portion of the Property contains no improvements other than asphaltic paving throughout much of the area and a short rock retaining wall lining the south property line. Some of the asphalt paving covers the extent of the former UST excavation.

Figure 2 shows the site plan. Note the "Duvall Market" building in the central portion of the figure. This building resides in the north half of the Property.

Photographs of the Property are presented in Attachment A.



Existing Conditions within Sidewalk and Street Areas. There are several underground utilities at or near the Property within Main Street, including a joint utility vault (containing power, cable and telephone). According to the City, these utilities are considered critical main lines installed during 2008/9 Main Street improvements and are not to be modified by future below grade except at extreme expense. See Attachment A for a photograph showing electrical utility markout in the sidewalk.

<u>Surrounding Land Use</u>. The entire Property is (15802 Main Street) is bordered on the north by a convenience market (shown on Figure 2) with an antique mall further north, northeast by a closed drive-through carwash (with small apartments and single-family homes further east), northwest by vacant land, west by single-family residential and a tavern, and southwest by the Valley C Shell store/station (closed LUST site situated cross/down-gradient of the Property).

# 1.2 Previous Environmental Reports

The following environmental reports have been incorporated into this assessment of the Property and adjacent City of Duvall ROW.

• Independent Cleanup Action Report, WT Services Company, September 24, 2002. The previous owner, Helmuth Schlueter, entered the Property into the Voluntary Cleanup Program (VCP) through the Washington Department of Ecology (Ecology) in an effort to remove the two UST's from the Property. In 2002, gasoline contaminated soil, including benzene, was found during the removal of the tanks. The contaminated soil was found to extend under the adjacent sidewalk. While gasoline contaminated soils were removed from the eastern portions of the excavation, removal of soil contaminated above MTCA thresholds in the western portion of the excavation was stopped out of concern for destabilizing the sidewalk and possible underlying utilities.

Kane Environmental reviewed Ecology's files. The underground storage tanks were removed in July 2002 by WT Services Company (UST contractor). Native soils consist of "gray sandy silt, dense damp". No groundwater was encountered in the excavation. An estimated 236 tons of soil was removed and sent off-site to a nearby landfill. WT Services reported that the soil remaining in the excavation was sufficiently clean, per Ecology allowable maximum concentrations.

Subsequent discussions between Ecology and WT Services indicated that the southwest corner of the excavation (and beyond the property line to the south and west) was contaminated above Ecology's MTCA Method A Soil Cleanup Levels for Unrestricted land Uses. Although the actual extent of contamination in the ROW to the south and west of the Property was unknown, a review of soil analytical data suggests that a portion of the old sidewalk was removed to access contaminated soil. Also, Ecology's written conclusions in their files indicated a possible "soil only" impact but did not rule out the potential for groundwater impacts.



Mr. Schlueter's communication with Ecology personnel was discontinued after the owner decided to sell the Property. The VCP designated the Property as a contaminated site containing residual benzene and gasoline in the soil.

Refer to Attachment B for the WT Services report, along with a figure with hand-written annotations from Ecology (source: Ecology paper file). Elements of the WT figures are included in Figure 3, including the approximate extents of the remedial excavation, and select analytical results. Regions of accessible contaminated soil on the Property were over-excavated and removed for disposal (729-6), whereas inaccessible regions of contaminated soil were left in place in the southwest corner of the Property (729-05) and adjacent to the Property to the west (808-01, 808-03).

Supplemental Environmental Sampling for Contaminated Soils, Main Street Reconstruction, Duvall, Washington, HWA Geosciences, October 27, 2008. In preparation for the reconstruction of Main Street, the City of Duvall hired an engineering firm who hired HWA Geosciences to conduct a geotechnical design study for new pavements and utilities. Part of that HWA effort included the excavation and sampling/testing of soil in shallow test pits located in the right of way within Main and Stewart.

The test pits were excavated to depths of four feet in the utility alignment and soil samples were collected at depths of two and four feet in each of the test pits. Shallow soils (less than three feet) typically consisted of mottled brown to gray silty sand fill soils, and deeper soils typically consisted of red-brown to gray silty sand. Root material and organic deposits were observed in some deeper soils.

Lube oil range petroleum was detected in one test pit sample, TP-23+25-2, at two feet below ground surface (110 mg/kg). Gasoline range petroleum was detected in one test pit sample, Joint Trench at four feet below ground surface (5 mg/kg). These concentrations are below the respective MTCA Method A Cleanup Levels for Unrestricted Land Uses for oil and gasoline range petroleum hydrocarbons (2,000 and 30 mg/kg, respectively).

This report is included as Attachment C, and locations of HWA test pits adjacent to the southwest corner of the Property, and the respective soil test results, are plotted on Figure 3.

 Phase I Environmental Site Assessment Report, Global 2000 Environmental Partners, LLC, May 31, 2013. According to the 2013 Phase I ESA report, the:

"Environmental regulatory database indicates that there are no NPL sites, no CORRACTS sites, no TSD/CORRACTS sites and no SPL sites within one mile radius. There are no TSD sites, one LUST sites (closed site), no SWLF sites and no public drinking water wells within one-half mile radius of the subject property. Within one-quarter mile there are no RCRA Violation sites, no TRIS sites and two registered UST/AST sites. There are no ERNS sites, no RCRA Conditionally Exempt Generator, no Small Quantity Generators, no reported SPILLS sites and no RCRIS Notifiers sites within 1/8 miles. There are two Historical Auto Stations and one Historical Cleaners within ½ mile of the Subject Property. There is no record of environmental contamination related to the historical use of nearby properties. The agency



records for each of the identified sites were reviewed by the consultant who wrote the EA report to determine the environmental impact of the various businesses. In the consultant's opinion, none of the businesses have adversely impacted the Subject Property or the adjacent properties. Furthermore the adjacent properties were inspected during the investigation of property uses and none of these businesses generate hazardous waste or store petroleum hydrocarbon products."

Due to the 2002 UST removal record in Ecology's files, the Property is in the ALLSITES report as a Contaminated or Toxic site that is in the remediation phase and an Open Site for regulatory enforcement action. The Property is also listed in the CSCSL category of contaminated sites which is the State equivalent of the federal CERCLIS designation. The Property is also considered an Open LUST Site for regulatory classification of required actions to close the site and obtain a No Further Action designation.

At the time the 2013 Phase I ESA report was written, Ecology was contacted regarding the status of the file on the Property. Ecology comments that the site was dropped from the LUST program because there were no follow up reports from the owner to advise the agency of new progress on the site remediation and closure. Ecology said that owner or the responsible party must reapply to the agency to participate in the VCP and close the site without state intervention.

The 2013 Phase I ESA (without the regulatory database search report) is included as Attachment D.

Submittal of VCP Application to Ecology 2015. In February 2015, the current owner of the Property (Mr. Ted Yi of YHC Enterprises Corp) submitted a Voluntary Cleanup Program application to the State Department of Ecology. The site was re-accepted to the VCP program, effective May 22, 2015, under VCP Project Number NW2972. Ms. Tamara Cardona, of the Northwest Regional Office is the VCP project manager assigned to this site.

The VCP acceptance letter is included as Attachment E.

# 1.3 Scope of Work 2015

Kane Environmental completed a Limited Phase II ESA including collection of soil (groundwater was not encountered) from three locations within the City of Duval ROW adjacent to the Property. The following tasks were performed in 2015 to complete this scope of work:

- **Utility Locate.** A thorough investigation to locate underground utilities in the City of Duvall ROW to the south and west of the Property was undertaken prior to conducting any sub-surface borings.
- Street Use Permit and Traffic Control Plan. Kane Environmental worked with City of Duvall Public
  Works engineers and staff to develop a Street Use Permit and Traffic Control Plan for the completion
  of three (3) borings in the City of Duvall ROW.



- Hollow Stem Auger (HSA) Borings. Boretec, Inc., of Bellevue, Washington, was contracted to advance three (3) borings in the City of Duvall ROW to the south and west of the Subject Property (Figure 3).
- **Chemical Analysis.** Select soil samples (no groundwater was encountered) were analyzed for the following chemical constituents:
  - o Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260,
  - o Total Petroleum Hydrocarbons (TPH) as Gasoline by Method NWTPH-Gx,
  - o Lead by EPA Method 6020.

# 1.4 Scope of Work 2016

In an Ecology opinion letter dated December 23, 2015 (Attachment E), additional characterization of the groundwater on the Property and adjacent ROW, as part of a Supplemental Phase II ESA, was required.

Kane Environmental proposed to install and test three (3) groundwater monitoring wells, with two located in formerly contaminated regions of the Property and one in the ROW to the west. To ensure that this approach was acceptable to Ecology, we discussed the work in the context of Ecology's and the Property owner's plans for closure under MTCA.

The following tasks were completed in February/March 2016 to complete this scope of work:

- Utility Locate. A thorough investigation to locate underground utilities in the southwestern extent of
  the Property and in the City of Duvall ROW to the west of the Property was undertaken prior to
  conducting any sub-surface borings.
- Street Use Permit and Traffic Control Plan. Kane Environmental worked with City of Duvall Public Works engineers and staff to develop a Street Use Permit and Traffic Control Plan for the installation of one (1) groundwater monitoring well in the City of Duvall ROW.
- Hollow Stem Auger (HSA) Groundwater Monitoring Well Installations, with Soil and Groundwater Sampling. Boretec, Inc., of Bellevue, Washington, was contracted to install three groundwater monitoring wells, with two in the southwestern extent of the Property and one in the City of Duvall ROW to the west of the Property (Figure 3). Soil samples were collected at the time of drilling. Groundwater monitoring wells were developed and sampled after installation.
- Chemical Analysis. Select soil samples and all groundwater samples were analyzed for gasoline and related chemical constituents (see Section 4.0).



# 2.0 SUBSURFACE CONDITIONS

# 2.1 Geologic Setting

The Property is located in the Puget Sound Basin, which had the majority of the solid deposits and land features deposited during the Pleistocene Epoch, which began approximately 1.5 million years ago. The Geologic Map of the Carnation Quadrangle indicates that the site is underlain by Tokul alluvium. The lithology consists of brown, light-brown, inter-bedded gravelly sandy loam. Humic material is common in the upper 1-2 feet and inter-bedded gravel in the lower part (Global 2000 Environmental Partners, LLC, 2013).

Review of available logs of nearby water wells and results of explorations conducted for this report indicates medium dense to very dense (increasing with depth) sandy glacial till soils. Refer to Section 5.0 for the results of explorations performed by Kane environmental for this report.

# 2.2 Hydrogeologic Setting

The U.S. Geological Survey (USGS) Quadrangle Topographic Map (Figure 1) indicates that the ground surface of in the vicinity of the Property is gently sloping down to the west. The elevation of the Property is approximately 75 feet above mean sea level (msl).

A review of available data regarding depths to groundwater producing aquifers in the area, did not yield any groundwater production wells or monitoring wells in the vicinity of the Property. Results of explorations for this Property (see Boring Logs, Attachment F) suggested no indicators of seasonal or perennial groundwater in the upper 15 feet, except for a small zone of perched water directly under the asphalt slab encountered during installation of KMW-1. Perched zones were not encountered during UST removal (2002), 2015 soil borings, or 2016 groundwater monitoring well installations KMW-2 or KMW-3.

Based on review available information, we conclude that the near-surface groundwater encountered in KMW-1 is likely due to surface water infiltration from the eastern portion of the Property contributing to a seasonal small inconsequential and isolated perched zone in select areas directly underneath the asphalt surface.

In 2016, the continuous aquifer on the Property was encountered during groundwater motoring well installation at depth approximately 45 to 55 feet below ground surface (bgs). Groundwater at these three locations was observed to be flowing artesian, with static water levels at approximately seven feet above ground surface. See Section 3.5 for details regarding the artesian conditions.

Static elevations of groundwater in KMW-1, KMW-2, and KMW-3 measured on February 29, 2016, are presented in the data tables in Figure 3 as feet above mean sea level (msl). Comparison of these elevations yields a calculated direction of groundwater gradient to the west-southwest, towards the Snoqualmie River.



While the artesian conditions, coupled with the slightly different well construction of the three wells, may affect the accurate measurement of static water elevations at each location, the calculated gradient does generally follow local topography and the presumed flow of groundwater in the region.

As detailed in Section 5.0 of this report, no petroleum related groundwater impacts were encountered. Given the above interpretation of groundwater gradients, we reviewed on-line records for regional groundwater-related concerns. County records show that a "Critical Aquifer Recharge Area" is located within the floodplain lowlands on either side of the Snoqualmie River.

Note: "Critical Aquifer Recharge Areas" (CARAs) are one element of the "critical areas" for which Washington's Growth Management Act (RCW 36.70)(GMA) requires local governments to develop policies or regulations to protect their functions and values. Critical Aquifer Recharge Areas are the geographic areas that have a "critical recharging effect on aquifers used for potable water" (RCW 36.70A.030(5)). As of 2004, King County was reviewing and updating its existing ordinances and policies for the protection of CARAs, which were first enacted in 1994 (King County, 2015).

County records also show four 10-year radius Wellhead Protection Areas situated about 2 miles away from the Property. Even though the Property contamination is isolated within soil only, all of these Areas are situated within regions that are highly unlikely to be impacted by contamination from the Property.

Per King County online maps, the closest "groundwater source well" is located about 500 feet north and cross-/up-gradient of the Property. This well was installed to a depth of about 270 feet in 1948 and has not been sampled/tested since then. Also, there are no "Sole Source Aquifers" within the City Duvall.



### 3.0 FIELD METHODOLOGY

# 3.1 Utility Locate

Kane Environmental contacted the Washington Utilities Underground Location Center prior to starting the fieldwork to conduct a locating survey for telephone, gas, water, sewer, communication, and electric service for study areas in the City of Duvall ROW adjacent to the Property. Areas identified as utility corridors by Washington Utilities Underground Location Center were marked. Boring locations were chosen following the utility locate. No work occurred in areas marked as containing underground utilities.

# 3.2 Sampling Locations 2015

<u>Hollow Stem Auger Temporary Borings</u>: On March 24, 2015, hollow stem auger (HSA) borings were advanced in the City of Duvall ROW adjacent to the southwest corner of the Property. Borings were completed to 14 to 16.5 bgs. Most of borings were terminated due to hollow-stem auger drill rig refusal on very dense glacial till and due to the lack of gross indicators of gasoline contamination at final depth.

Soil samples were collected for analysis. No groundwater was encountered during completion of these three borings. No groundwater monitoring wells were installed. Temporary borings were backfilled, sealed, and patched according to Ecology's well drilling regulations and City of Duvall specifications detailed in the Street Use Permit for the project.

See Figure 3 for boring locations. Lithology and field observations are included in Boring Logs presented in Attachment F.

- B-1 was located in a Main Street Northeast sidewalk planter, west of the southwest Property corner;
- B-2 was located in the westbound parking lane of Northeast Stewart Street, south of the southwest Property corner;
- **B-3** was located in the central planter between the northbound and southbound lanes of Main Street Northeast, west of the southwest Property corner and west of B-1.

During this initial exploration, additional borings were not advanced because the gasoline contamination was restricted to the upper few feet of soil (Section 5.2), which was determined to be well above the groundwater table. In addition, even if additional borings were needed in order to better define the extent of contamination to the west of the Property, the City of Duvall will not allow borings in the Main Street Northeast sidewalk or traffic lanes.



# 3.3 Groundwater Monitoring Well Installations 2016

<u>Hollow Stem Auger Monitoring Well Installations:</u> Between February 8 and 10, 2016, HSA borings were advanced in the southwestern portion of the Property and City of Duvall ROW adjacent to the southwest corner of the Property to the west. Borings were completed to 50 to 60 feet bgs, with groundwater monitoring wells installed at all three locations.

Soil samples were collected for analysis. Groundwater monitoring wells were developed approximately two weeks after installation, and sampled approximately three days after development. See Figure 3 for monitoring well locations. Lithology and field observations are included in Well Logs presented in Attachment F.

- KMW-1 was located in the southwest portion of the Property in the northwest region of the 2002 remedial excavation;
- KMW-2 was located in the Main Street Northeast sidewalk planter, west of the southwest Property corner adjacent to the 2015 boring B1;
- KMW-3 was located in the southwest corner of the Property in the southwestern extent of the 2002 remedial excavation.

#### 3.4 Soil Sample Collection Methods

Soil samples from the HSA borings were collected in 18" steel split spoon samplers. Soil samples were logged for physical properties such as grain size, color, and moisture. Soil samples were obtained utilizing the collection, preparation and preservation methods outlined in US Environmental Protection Agency (EPA) Method 5035A for analysis of volatile constituents, as required by the Washington State Department of Ecology (Ecology). Soil samples were placed into 40 ml vials containing 5 ml methanol, as well as 4-ounce pre-cleaned, glass jars with Teflon lids. The samples were immediately placed in an ice filled cooler and transported to Fremont Analytical, Inc. in Seattle, Washington under standard chain-of-custody procedures. Soil sampling nomenclature identified each soil sample with the boring identification number, followed by a number designating the sample depth. For example, soil sample "B-2:4" was from the second soil boring (2015) and the sample was collected at 4 feet bgs.

### 3.5 Groundwater Sample Collection Methods

No groundwater was encountered from 2015 temporary borings (B-1, B-2, B-3) within the depth of the borings (14 to 16.5 feet) and was anticipated to be at least 10 or more feet below the bottom of all borings. All three 2015 temporary borings were terminated in uncontaminated soil. As a result, no groundwater samples were originally obtained from those locations.



Permanent groundwater monitoring wells KMW-1, KMW-2, and KMW-2 were installed in 2016 under flowing artesian conditions, with the producing aquifer encountered approximately 45 to 55 feet bgs, with static water levels at approximately 7 feet above the ground surface. The presence of the artesian conditions necessitated modification of standard well installation, development, and sampling procedures as follows:

- All groundwater monitoring wells were constructed with 2-inch diameter ball valves attached to the upper extent of their 2 inch PVC risers. These valves can be opened when additional riser material is coupled to the top of the risers allowing access to the groundwater in the wells for static elevation measurements and pumping for development and sampling. Two five foot sections of 2-inch diameter PVC riser have been dedicated for each groundwater monitoring well. These risers are being stored by Kane Environmental for use for groundwater measurements and sampling.
- KMW-2 and KMW-3 were developed by manually inserting a submersible pump through the valve to the bottom of the well and pumping at high flow rate while surging with the submersible pump. The pumping rate exceeded the recharge rate, allowing for development without using the additional above ground risers. Approximately nine well volumes were purged for development, assuring that turbidity had been reduced and fine grain sediments had been removed from the wells.
- KMW-1 recharged at a rate exceeding the capacity of the submersible pump. Therefore, the above ground riser extension was required to avoid overflow of groundwater from the well onto the ground surface. The submersible pump could not be lowered through shutoff valve from the riser extension due to the slightly reduced inner diameter of the valve. Therefore, KMW-1 was developed by lowering the submersible pump through the above ground riser to the ground surface. Approximately nine well volumes were purged for development, assuring that turbidity had been reduced and fine grain sediments had been removed from the well.

Groundwater was sampled more than 48 hours after development. Tubing was inserted through the above ground risers, through the shutoff valves, and mid-way into the screened section of each well. Groundwater was withdrawn using a peristaltic pump at a low flow rate until stabilization of physical parameters (temperature, pH, conductivity, and total dissolved solids). Approximately three to four gallons of groundwater were purged from each well prior to parameter stabilization and sample collection.



### 4.0 ANALYTICAL METHODS

Soil and groundwater samples were submitted to the Fremont Analytical in Seattle, Washington. The following analyses were conducted on selected samples:

- o Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260;
- o Gasoline additives (EDB, EDC, MtBE) by EPA Method 8260;
- o Total Petroleum Hydrocarbons (TPH) as Gasoline by Method NWTPH-Gx;
- Lead by EPA Method 6020.

All analyses were performed in accordance with Fremont Analytical's in-house Quality Assurance/Quality Control Plans. Sample analyses were performed in compliance with EPA analytical methods and Ecology guidelines. Samples were analyzed within specified holding times. All detection limits were within method requirements and no factors appeared to adversely affect data quality.

# 4.1 Laboratory QA/QC Procedures

Internal test methods run by the laboratory to ensure data accuracy and reproducibility include method blanks, laboratory control standards, sample duplicates, matrix spikes, and matrix spike duplicates.



### 5.0 RESULTS

Results presented in this section include all 2015 (B-1, B-2, and B-3) soil results, and all 2016 (KMW-1, KMW-2, and KMW-3) soil and groundwater results.

# 5.1 Field Screening

All soil samples collected during 2015 completion of borings B-1, B-2, and B-3 contained no visual evidence of petroleum contamination or any significant odors indicative of petroleum or related contamination with one exception. Soil samples recovered from the upper 12 feet of Boring B-1 presented high PID readings (over 200 ppm) in the upper 7 feet with near background readings below 12 feet. This depth range and the location of the boring is consistent with conditions revealed during the initial 2002 UST removal on the Property.

All soil samples collected during 2016 installation of groundwater monitoring wells (KMW-1, KMW-2, and KMW-3) contained no visual evidence of petroleum contamination or any significant odors indicative of petroleum with the exception of some of the near-surface soil samples collected from KMW-1. Soil collected between 5 and 6.5 feet bgs contained a fuel odor and created a sheen when introduced to water. Soil collected from 7.5 to 9 feet bgs contained a slight fuel odor and created a slight sheen when introduced to water. All underlying soils from KMW-1 contained no field screening evidence of petroleum contamination. Near surface soil samples were not collected from KMW-2 since the location was adjacent to boring B-1 which was fully evaluated to a total depth of 14 feet bgs in 2015.

#### 5.2 Soil Samples

Figure 3 displays all boring locations and soil test results. Soil sample results are summarized in Table 1 and Table 2. The 2015 and 2016 full analytical reports are included in Attachment G. Soil samples collected at 4 feet and 6.5 feet bgs in Boring B-1, and at 6 feet and 7.5 feet bgs in KMW-1, contained TPH as gasoline at concentrations exceeding the MTCA Method A Soil Cleanup Level for Unrestrictive Land Uses of 30 mg/kg (benzene having been historically present at the site at the time of UST removal in 2002). A sample collected at 4 feet bgs in boring B-3 contained TPH as gasoline below the MTCA Method A Level. No TPH was detected in soils analyzed from boring B-2, or groundwater monitoring wells KMW-2 and KMW-3. No benzene was detected in any 2015 or 2016 soil samples. No gasoline additives were detected above MTCA Cleanup Levels in 2015 soils analyzed (Table 2).

# 5.3 Groundwater Samples

No groundwater was encountered during completion of temporary HSA borings B-1, B-2, and B-3 in 2015. Groundwater collected from KMW-1, KMW-2, and KMW-3 in February 2016 contained non-detectable concentrations of BTEX and TPH as gasoline. Lead and other gasoline additives were not analyzed.



### 6.0 DISCUSSION AND CONCLUSIONS

# 6.1 Summary of Findings

The historic use of the Property (southern half of 15820/15802 Main Street) included vehicle fueling with gasoline. The USTs were removed in 2002. During the UST removal, soils with gasoline and benzene concentrations above applicable MTCA thresholds were left in-place along the extreme southwestern corner of the Property. Similarly contaminated soils were also left in-place in the City of Duvall ROW adjacent to the southwest corner of the Property.

Explorations and testing in March 2015 and February 2016 were conducted to better define the extent of soil contamination remaining in place and to determine if the local groundwater had been impacted. The narrow pocket of gasoline impacted soil reportedly left in-place in 2002 was confirmed to be present in the western portion of the southwestern corner of the Property, and in the City of Duvall ROW west of the southwestern corner of the Property. Based on available soil data, Figure 3 shows the approximate boundary of gasoline impacted soil on and adjacent to the Property to the south and west.

The area of contaminated soil on the Property and beneath the existing ROW (adjacent to the Property) is anticipated to be on the order of 1,000 square feet. The maximum bottom depth of the pocket of contaminated soil is expected to be between 8 and 10 feet bgs. The top of the pocket is expected to be about 2 feet below ground surface and likely increasing in depth with distance west. Figure 4 displays a cross section of the zone of contaminated soil using data from 2002, 2015, and 2016 for samples collected near the southwestern Property boundaries.

No groundwater was encountered or sampled during the 2002 UST removal/excavation to approximately eight (8) feet bgs, or the 2015 HSA borings to a maximum depth of 16 feet bgs. Groundwater collected from three flowing artesian monitoring wells in 2016 contained no evidence of gasoline or related impacts in locations that previously and currently contain soil impacts.

Kane Environmental concludes that while gasoline contaminated soil remains in place in portions of the Property, and adjacent ROW containing main feeder utilities (including the adjacent sidewalk), and in other areas inaccessible for excavation, no groundwater contamination relating to the original leaking underground storage tanks is present. Therefore, Kane Environmental requests closure of the site according to Model Remedy #3 as described in *Model Remedies for Sites with Petroleum Contaminated Soil* (Publication No. 15-09-043) (Ecology 2015).



# 6.2 Conceptual Site Model and Exposure Pathways

A conceptual site model (CSM) utilizes the physical setting of the Property and the chemical properties of the contaminants to determine potential fate and transport mechanisms at the Site. The CSM considers sources of contaminants, methods of release, transport and exposure pathways, and potential receptors.

The Site CSM (Attachment H) reflects the current and future land use of the Site. Future land use zoning is reportedly intended to remain unchanged for many years. The CSM is also based on reviewed historical information and data gathered from soil and groundwater sampling at the Site. A summary of the CSM is presented in the following paragraphs.

The primary route of potential exposure to contaminated media at the Site is by inhalation of vapor containing elevated concentrations of VOCs that originate from contaminated soil.

On this basis, dermal contact and ingestion with contaminated soil and soil vapor is not considered likely for current site and future site use with one possible exception namely, ROW utility maintenance access to vaults (if any are installed in the area) and/or construction workers if below-grade excavations are needed to redevelop the Property in the future. Other than shallow vault access (using confined space procedures), below-grade work in the right of way is unlikely given that the roadway and all utilities were reconfigured in 2008/9.

Because groundwater is not impacted and it exists at significant depth, there are <u>no</u> human receptors likely to ingest or otherwise contact groundwater at the Property and, given the municipal water supply, also in the region.

# 6.3 Ecological Risk

Since a release of TPH-Gasoline and related VOCs was discovered in the soil adjacent to and within the right of way at concentrations exceeding the relevant MTCA Method A Cleanup Levels, the MTCA Cleanup Regulations under WAC 173-340-7490 require that the Property be screened to determine if a terrestrial ecological evaluation needs to be completed, since a release of hazardous substances to soil at the Property may pose a threat to the terrestrial environment.

Presented in Attachment I is a completed "Simplified Terrestrial Ecological Evaluation – Exposure Analysis Procedure" which results in termination of the process, not requiring further evaluation.

### 6.4 Applicable or Relevant and Appropriate Requirements

Cleanup actions under MTCA (WAC 173-340-710) require the identification of all Applicable or Relevant and Appropriate Requirements (ARARs). These requirements are defined as:

"Applicable" requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state



law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a site.

"Relevant and appropriate" requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a site, address problems or situations sufficiently similar to those encountered at the site that their use is well suited to the particular site.

Potential ARARs were identified for each medium of potential concern. The primary ARARs relating to the cleanup action include:

- MTCA, Chapter 70.105D of the Revised Code of Washington (RCW);
- Cleanup Regulations, WAC 173-340; and
- Dangerous Waste Regulations, WAC 173-303.

These primary ARARs are anticipated to be the most applicable to the cleanup action because they provide the framework for the cleanup action, including applicable and relevant regulatory guidelines, cleanup standards, waste disposal criteria, references for additional ARARs, and standards for documentation of the cleanup action.

Other applicable ARARs and guidance documents for cleanup of the Property may include:

- Guidance for Remediation of Petroleum Contaminated Sites, State of Washington Department of Ecology, September 2011;
- Model Remedies for Sites with Petroleum Contaminated Soils, State of Washington Department of Ecology, September 2015;
- Occupational Safety and Health Act, Part 1910 of Title 29 of the Code of Federal Regulations;
- Safety Standards for Construction Work, WAC 296-155;
- Solid Waste Management, Reduction and Recycling, RCW 70.95;
- Minimum Functional Standards for Solid Waste Handling, WAC 173-304;
- Criteria for Municipal Solid Waste Landfills, WAC 173-351; and
- Accreditation of Environmental Laboratories, WAC 173-50.



# 6.5 Cleanup Criteria

Currently, the Property is utilized for retail and commercial purposes including convenience store and related parking. Proposed soil and groundwater cleanup levels will follow MTCA Method A Cleanup Levels. The point of compliance for soil and groundwater is defined in WAC 173-340-740(6). The point of compliance for soil and groundwater is throughout the Property and within adjacent ROW that is impacted.

# 6.5.1 Soil Cleanup Levels

The selected cleanup levels for the identified Constituents of Concern in soil are as follows:

 MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses (WAC 173-340-900, Table 740-1):

o GRO: 30 ppm (due to the historic presence of benzene)

Benzene: 0.03 ppm

Toluene: 7 ppmEthylbenzene: 6 ppmXylenes: 9 ppm

# 6.5.2 Groundwater Cleanup Levels

The selected cleanup levels for the identified Constituents of Concern in Groundwater are as follows:

MTCA Method A Cleanup Levels for Groundwater (WAC 173-340-900, Table 720-1):

GRO: 800 ppb (due to the historic presence of benzene)

Benzene: 5 ppb

Toluene: 1,000 ppb
 Ethylbenzene: 700 ppb
 Xylenes: 1,000 ppb

# 6.6 Data Gaps

Due to restrictions enforced by the City of Duvall and the presence of underground utility corridors, no additional borings could be completed in the ROW adjacent to the southwestern corner of the Property. Kane Environmental originally proposed to complete up to six additional borings in the ROW adjacent to the southwestern portion of the Property to fully characterize the lateral and vertical extent of the gasoline impacted soil in the ROW, specifically to the southwest and northwest of the source area. However, due to restrictions, the nearest boring locations permissible by the City would have been on the west side of Main Street Northeast approximately 90 feet northwest and 75 feet southwest of the source area.



Investigations in these areas are unlikely to provide useful delineation information due to the distance from the known release point on the subject Property.

The locations of borings B-1/KMW-2, B-2, and B-3, were approved by the City of Duvall, due to lack of impacts to paved lanes of travel, crosswalks, or sidewalks (B-3 being located in the parking lane of Stewart Street Northeast). In addition, the City permit mandated patching very large areas (to the nearest seam/joint in some areas) surrounding each boring if drilled in asphalt paving or concrete roadway/sidewalk. Effectively, the City would not allow closure of lanes of Main Street Northeast, not disturbance of the aesthetics of their paved surfaces.

The lack of additional data to the southwest and northwest of the source area on the Property is considered a data gap limiting the accurate determination of the exact size of the region of contaminated soil in the ROW. However, Kane Environmental presents the lack of soil impacts at location B-3 as evidence that soil contamination diminishes at some point between locations B-1/KMW-2 and B-3, and does not extend any farther downgradient from the source area. Therefore, a similar plume boundary is extrapolated to the southwest and northwest of the historic source area (Figure 3). In addition, the 2008 test pit results support this plume boundary.

There are no other data gaps affecting the characterization of the site presented in this report.

# 6.7 Conclusion

Based on the data collected in 2002, 2008, 2015, and 2016, Kane Environmental concludes that a pocket of gasoline contaminated soil remains in place in the extreme southwestern corner of the Property and in the City of Duvall ROW adjacent to the southwest corner of the Property. This zone of contaminated soil is present in a region which was inaccessible for excavation in 2002 when the remedial excavation was conducted; and remains inaccessible for excavation due to the presence of buried utilities, and the Main Street Northeast ROW. Groundwater, collected from monitoring wells located in the original source area, currently and previously containing gasoline contaminated soil, was determined to contain no gasoline impacts.

Kane Environmental requests that Ecology issue an Opinion Letter for No Further Action with an environmental covenant, under Model Remedy #3 as defined in *Model Remedies for Sites with Petroleum Contamination* (Publication No. 15-09-043) (Ecology 2015). Kane Environmental will prepare the environmental covenant for submission to King County based on Ecology's opinion based on this report.



# 7.0 REFERENCES

Global 2000 Environmental Partners, LLC, 2013, *Phase I Environmental Site Assessment Report* (prepared for YCH Enterprises, current owner of Property and BBCN Bank) - May 31, 2013.

HWA Geosciences, 2008, Supplement Al Environmental Sampling for Contaminated Soils, Main Street Reconstruction; Duvall, Washington (prepared for WH Pacific, under contract to the City of Duvall) – October 27, 2008.

King County on-line parcel records including maps/records including Critical Aquifer Recharge Areas and Wellhead Protection zones. March 2015 (http://gismaps.kingcounty.gov/iMap/)

Washington Dept of Ecology, 2014, (full paper file - Facility/Site No.: 7646431, VCP No.: NW0995) - acquired by Kane Environmental, March 2015 (note: WT Services' 2002 report is included) - March 2014.

Washington Dept of Ecology, 2015, *Model Remedies for Sites with Petroleum Contaminated Soils,* Toxics Cleanup Program, Publication No. 15-09-043, September 2015.

Washington Dept of Natural Resources (water well log records online - <a href="https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx">https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx</a>), 2015 (January)

WT Services, 2002, *Independent Cleanup Action Report* (prepared for John Schlueter and William Minaglia, previous owners) - September 24, 2002



### 8.0 LIMITATIONS

Kane Environmental has performed this work in general accordance with generally accepted professional practices using the standard of the industry today, for the nature and conditions of the work completed in the same locality and at the same time as the work was performed, and with the terms and conditions as set forth in our proposal.

Kane Environmental shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time the work was performed. This Limited Phase II Environmental Site Assessment Report does not include other services not specifically described in the scope of work in Sections 1.3 and 1.4 of this report. Conclusions were made within the operative constraints of the scope of work, budget, and schedule for this project.

Our assessment of the property may change as new data become available, either from persons familiar with the site or during additional site studies, exploration or sampling. This report is intended for the exclusive use of Mr. Ted Yi, YHC Enterprise Corporation, and their designated assignees, for specific application to the referenced property. It is not meant to represent a legal opinion. No other warranty, express or implied, is made.

**FIGURES** 

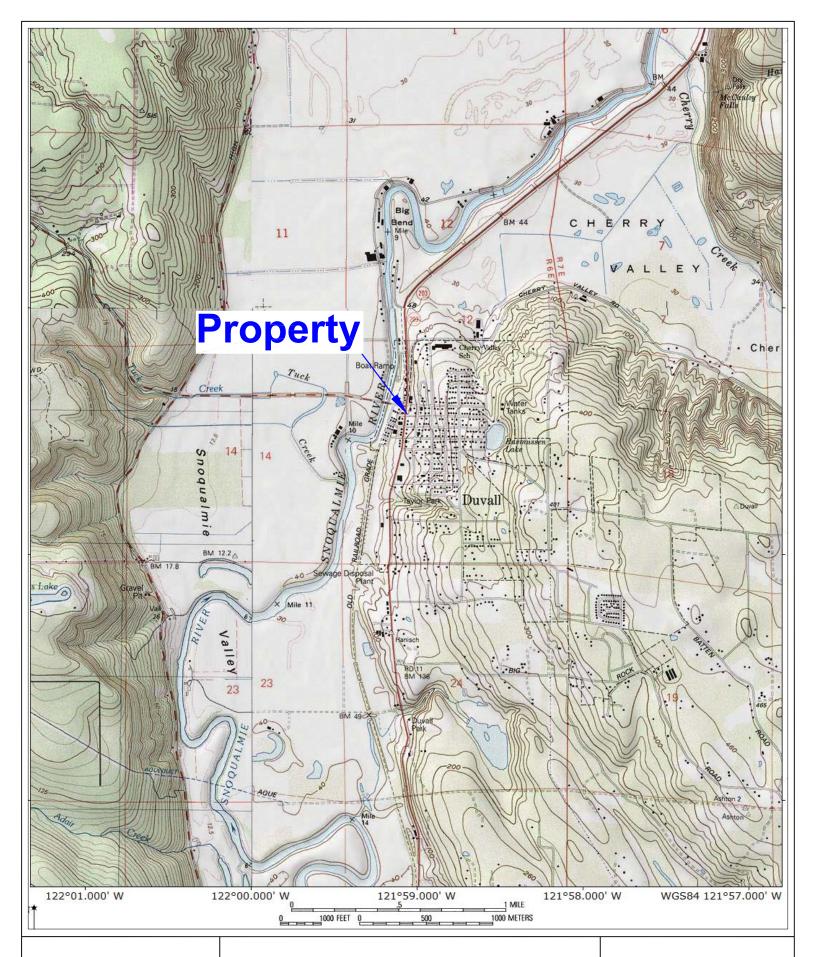




Figure 1 Vicinity Map



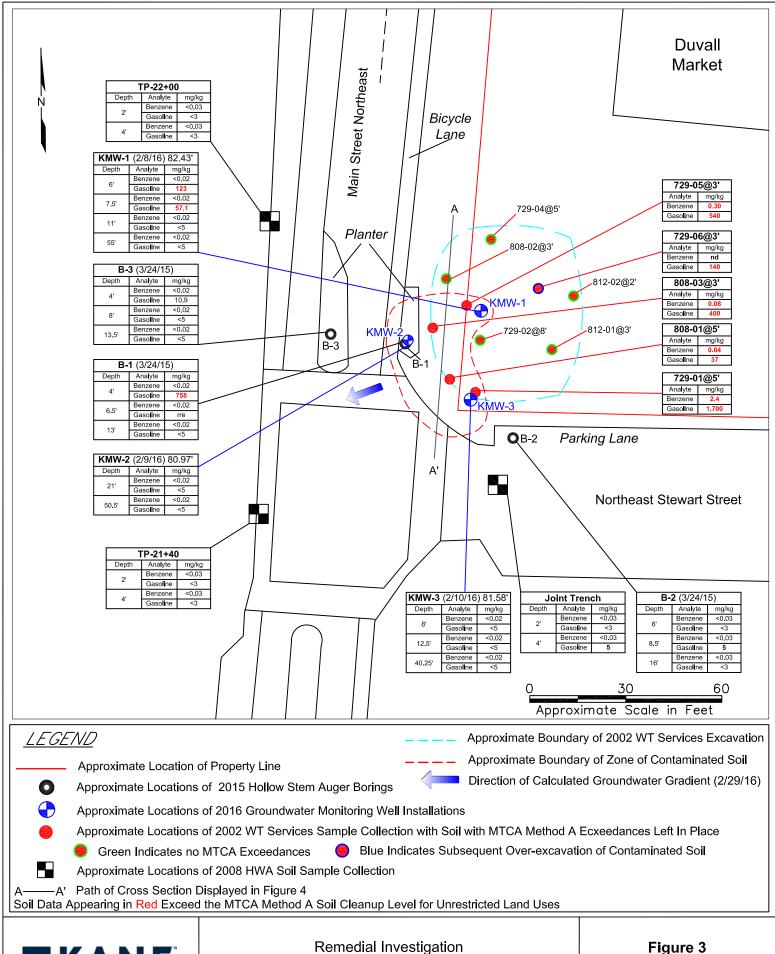
\_\_\_\_\_ Approximate location of property line 0 50 100

Approximate Scale in Feet

\_\_\_\_ Approximate Extent of Remedial Excavation (WT Services, 2002)

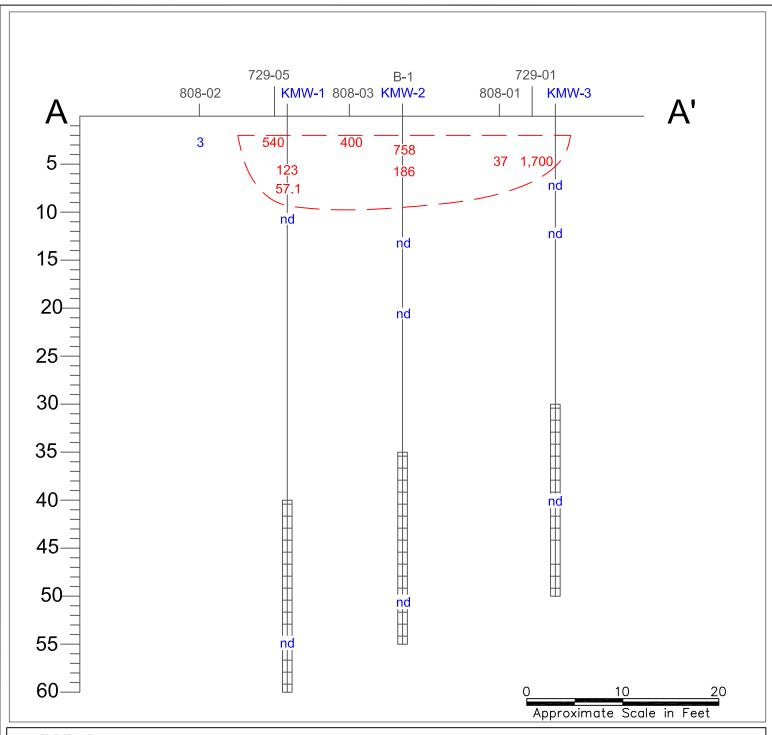


Remedial Investigation 15820 Main Street Northeast Duvall, Washington **Figure 2**Site Plan





Site Plan Detail with Sample Locations and Results



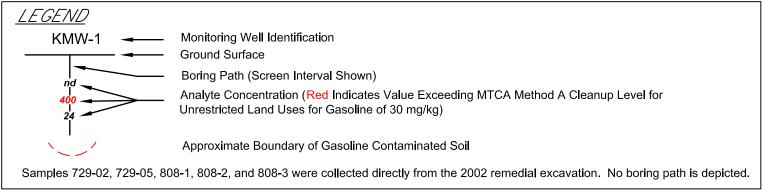




Figure 4
Cross Section A - A'
With TPH as Gasoline in
Soil (mg/kg)

**TABLES** 

TABLE 1 Summary of BTEX and TPH as Gasoline in Soil 15820 Main Street Northeast Duvall, Washington

Duvan, Washington								
Samole 10	Sample Deru	Samole Date	Benzene	$\gamma_{OU_{60R_6}}$	Enymonrene	1,116,116,5	Start Polnoleum L	Gasoline Gasoline
	(in feet)		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ĺ
B-1:4	4	3/24/2015	<0.0148	<0.0148	<0.0221	<0.0148	758*	
B-1:6.5	6.5	3/24/2015	<0.00896	<0.00896	< 0.0134	<0.00896	186*	
B-1:13	13	3/24/2015	<0.00849	<0.00849	< 0.0127	<0.00849	<2.12	
B-2:6	6	3/24/2015	<0.00785	<0.00785	<0.0118	<0.00785	<1.96	
B-2:8.5	8.5	3/24/2015	< 0.00822	< 0.00822	< 0.0123	<0.00822	<2.05	
B-2:16	16	3/24/2015	< 0.00701	< 0.00701	< 0.0105	< 0.00701	<1.75	
B-3:4	4	3/24/2015	< 0.0183	<0.0183	< 0.0274	< 0.0183	10.9	
B-3:8	8	3/24/2015	< 0.0104	<0.0104	< 0.0155	< 0.0104	<2.59	
B-3:13.5	13.5	3/24/2015	<0.00692	<0.00692	< 0.0104	<0.00692	<1.73	
KMW-1:6	6	2/8/2016	<0.00988	<0.00988	<0.0148	<0.00988	123	
KMW-1:7.5	7.5	2/8/2016	< 0.0152	< 0.0152	<0.0228	< 0.0152	57.1	
KMW-1:11	11	2/8/2016	< 0.0107	<0.0107	< 0.0161	< 0.0107	<2.68	
KMW-1:55	55	2/8/2016	<0.0184	<0.0184	< 0.0276	<0.0184	<4.60	
KMW-2:21	21	2/9/2016	< 0.00876	<0.00876	< 0.0131	<0.00876	<2.19	
KMW-2:50.5	50.5	2/9/2016	<0.00949	<0.00949	< 0.0142	<0.00949	<2.37	
KMW-3:8	8	2/10/2016	< 0.0153	< 0.0153	< 0.0230	< 0.0153	<3.83	
KMW-3:12.5	12.5	2/10/2016	<0.0166	<0.0166	< 0.0250	< 0.0166	<4.16	
KMW-3:40.25	40.25	2/10/2016	<0.0172	<0.0172	<0.0258	<0.0172	<4.30	
MTCA Method Unrestric	d A Clean cted Land	•	0.03	7	6	9	30 <sup>b</sup> /100	

mg/kg = milligrams per kilogram (equivalent to parts per million [ppm]).

Shaded and Bold concentrations are above MTCA Method A Soil Cleanup Level for Unrestricted Land Uses.

b = Cleanup level used if benzene is present or total of ethylbenzene, toluene and xylenes is greater than 1% of gasoline mixture.

<sup>\* =</sup> reported as Gasoline Range Organics indicating the presence of unresolved compounds eluting from toluene to dodecane.

TABLE 2 Summary of Gasoline Additives (EDB, EDC, MtBE, and Pb) in Soil 15820 Main Street Northeast Duvall, Washington

Duvaii, Washington							
Samole 10	Sample Dem.	Samole Date	1,2-Dlb/omoes#_	"Ano (EDB)	Methy touth	Lead	
	(in feet)		mg/kg	mg/kg	mg/kg	mg/kg	ĺ
B-1:4	4	3/24/2015	<0.00369	<0.0221	<0.0369	6.51	
B-1:6.5	6.5	3/24/2015	< 0.00224	< 0.0134	<0.0224	2.96	
B-1:13	13	3/24/2015	< 0.00212	< 0.0127	< 0.0212	1.90	
B-2:6	6	3/24/2015	< 0.00196	<0.0118	<0.0196	2.28	
B-2:8.5	8.5	3/24/2015	< 0.00205	< 0.0123	<0.0205	2.07	
B-2:16	16	3/24/2015	< 0.00175	< 0.0105	< 0.0175	2.27	
B-3:4	4	3/24/2015	< 0.00456	< 0.0274	< 0.0456	10.8	
B-3:8	8	3/24/2015	< 0.00259	< 0.0155	<0.0259	2.25	
B-3:13.5	13.5	3/24/2015	<0.00173	<0.0104	<0.0173	2.01	
MTCA Method Unrestric	•	0.005	11*	0.1	250		

Notes:

mg/kg = milligrams per kilogram (equivalent to parts per million [ppm]).

Shaded and Bold concentrations are above MTCA Method A Cleanup Level for Unrestricted Land Uses.

<sup>\*</sup> No MTCA Method A Cleanup Level. MTCA Method B Cleanup Level reported.

TABLE 3 Summary of BTEX and TPH as Gasoline in Groundwater 3109 Rainier Avenue South Seattle, Washington

Sample 10	Sample Date	Велгеле	Tollene	Enhubenzene	thenes	Motocean	.casoline
		μg/L	μg/L	μg/L	μg/L	μg/L	Í
KMW-1	2/29/2016	<1.00	<1.00	<1.00	<1.00	<50.0	
KMW-2	2/29/2016	<1.00	<1.00	<1.00	<1.00	<50.0	
KMW-3	2/29/2016	<1.00	<1.00	<1.00	<1.00	<50.0	
MTCA Method . Level for Grou	•	5	1,000	700	1,000	800°/1,000	

# Notes:

μg/L = micrograms per liter (equivalent to parts per billion [ppb]).
Shaded and Bold concentrations are above MTCA Method A Groundwater Cleanup Levels.

a = Cleanup level used if benzene is present or total of ethylbenzene, toluene and xylenes is greater than 1% of gasoline mixture.

ATTACHMENT A SITE PHOTOGRAPHS



Project: Duvall Market

Site Address: 15820 (15802) Main Street Northeast; Duvall, WA

Photograph 1- From SW corner of Property, looking east



Photograph 2 – From SW corner of Property, looking at Market to NE





Project: Duvall Market

Site Address: 15820 (15802) Main Street Northeast; Duvall, WA

Photograph 3 – From NW corner of Property, looking south



Photograph 4 - From NE corner, looking SW



Project: Site Address: **Duvall Market** 

15820 (15802) Main Street Northeast; Duvall, WA



Photograph 5 – View southwest showing boring B-3 being advanced in the Main St NE median planter.



Photograph 6 – View northeast showing boring B-2 being advanced in the NE Stewart St parking lane.



ATTACHMENT B 2002 WT SERVICES – INDEPENDENT CLEANUP ACTION REPORT (WITH MAP FROM ECOLOGY FILE)

# **Environmental Consulting**

PO Box 239

Seahurst, WA 98062 WTSERCI110CL Fax and Phone 206 242 9477 206 295 6921

September 24, 2002

# **Independent Cleanup Action Report**

Duvall Market Square

RECEIVED

SEP 2 4 2002

Prepared for: John Schlueter and William Minaglia

DEPT OF ECOLOGY

PO Box 327 Duvall, WA 98019

Prepared by: Daniel A. Wright Certified Washington State Site Assessor

# Table of Contents

Page No.	Content
1-3	Report text
4	Vicinity Plan
5	Site Plan
6-14	Lab. Results, QA Data and Chain-of-Custody for samples obtained 7/29/02
15-18	Lab. Results, QA Data and Chain-of-Custody for samples obtained 8/08 & 8/12/02
19	Certificate of Disposal, Rinker Materials
20	Site Assessment Certification, Daniel A. Wright

PO Box 239 Seahurst, WA 98062 WTSERCI110CL Fax and Phone 206 242 9477

September 24, 2002

John Schlueter and William Minaglia PO Box 327 Duvall, WA 98019

Subject: Report of Independent Cleanup Action, 15802 Main Street, Duvall, WA.

Attention: John Schlueter, William Minaglia

This report presents a summary of an independent cleanup action performed in the location of 2 former underground storage tanks located at 15802 Main Street, Duvall, Washington.

# The Site

Located in the older business commercial area of downtown Duvall, the site consists of a mostly flat parcel, approximately 9600 square feet in size. Prior to the excavation activities described below, the majority of the parcel was covered with concrete pavement, including the floor slab of a former building located in the easterly portion of the parcel. At the east end of the parcel, the land slopes up to a public right of way which is currently a gravel alley. Surrounding parcels are largely retail commercial in nature, as the site is located on State Route 203 (Main Street), a heavily trafficked thoroughfare. This area has been commercially developed for an extended period, dating back to the late 1800's and early 1900's. The location of the site is shown on the Vicinity Plan on page 4.

#### UST Systems

On July 29, 2002, two underground petroleum storage tanks (UST'S) were decommissioned by removal by Tank Services Northwest, of Woodinville, Washington. The two former gasoline tanks were excavated and removed from the site, one approximately 675 gallons in volume and one approximately 4000 gallons in volume. Anecdotal information indicates that the tanks had last been operated in 1976 or thereabouts, and were not registered with Ecology.

Each tank contained a small amount of water with a trace of gasoline product. The tanks appeared to be in an intact condition, with no apparent holes or significant rust. The location of the tanks is shown on the site plan, page 5.

Page 2 15802 Main Street September 24, 2002

#### Soils and Groundwater

The soils encountered during excavation included fills placed around the tanks (brown to gray silty sand with gravel, moist, loose) to undisturbed native soils adjacent and under the tanks (light brown to dark gray sandy silt, dense, damp). No groundwater was encountered in the excavation.

# Soil Sampling and Analysis

During excavation of the tanks on July 29, 2002, a layer of soil ranging from 2 to 5 feet in depth exhibited a gasoline-like odor. This material was stockpiled separately under a cover of plastic sheeting. Additional samples were obtained from the four side walls and the base or floor of the excavation below the tanks. In addition a sample was obtained of the general excavation stockpile, to determine its suitability for backfill. The soil samples were obtained as discrete grab samples, placed in clean glass jars, stored in a chilled container and transported to Friedman and Bruya, Inc., Environmental Chemists, 3012 16th Avenue West, in Seattle, Washington. The samples were tested for Benzene, Toluene, Ethylbenzene, Xylenes and Gasoline by Method 8021B/NWTPH-Gx. The samples were also tested for Lead content by Method 6010. One sample was also tested for diesel and heavy oils by method NWTPH-Dx. The sample locations and depths are shown on the site plan, page 5.

The results of the laboratory analyses of samples obtained July 29 showed that significant gasoline contamination existed on the west side of the excavation (under the sidewalk adjacent to the street, sample 729-05), also on the south side of the excavation (at the sidewalk along Stewart Street, sample 729-01) and on the east side of the excavation (sample 729-06).

Laboratory results indicated that no detectable contamination existed at the base of the excavation below the tanks (sample 729-02), and from the north end of the excavation (sample 729-04). Soils selectively stockpiled for use as backfill showed to be uncontaminated and suitable for re-use on the site (sample 720-03).

The result of the analysis for diesel and heavy oils performed on soil sample 729-01 showed 170 parts per million. This result is below Method A cleanup levels, and is the result of spillover of gasoline-range hydrocarbons into the diesel range, due to high concentration of gasoline contamination in that sample.

The laboratory results, chain-of-custody form and quality assurance data are presented on pages 6 through 14. Page numbers for this report are shown in the upper right corner of each page.

Page 3 15802 Main Street September 23, 2002

## Cleanup Action

On August 8 and 9, 2002, excavation and transportation of gasoline-contaminated soils was undertaken. Approximately 236 tons of contaminated soil was transported to Rinker Materials, located at 6300 Glenwood Avenue in Everett, Washington. At this location the soils were remediated by thermal desorption (incineration). Certification of the soil remediation is presented on page 19.

Soils were excavated and transported for treatment from the west side of the excavation under the sidewalk and from the area east of the initial excavation. Additional excavation from the south end of the excavation was not undertaken due to the presence of a corrugated metal storm drain pipe and the risk of undermining the Stewart Street right-of -way.

Additional soil sampling was performed during and subsequent to the excavation operation in order to verify the effectiveness of the cleanup, and to identify any remaining areas of contaminated soil. The limits of the excavation and the locations and depths of the sampling are shown on the site plan, page 5.

The results of the laboratory analyses confirmed that soils with contamination levels above the Model Toxics Control Act (MTCA) Method A cleanup levels had been removed from the area east of the tank locations (samples 812-01 and 812-02), and also from the area west of the tank locations under the sidewalk area (samples 808-01 and 808-02). A sample obtained from the sidewall of the excavation of material remaining under the Main Street right-of- way showed that some significant contamination remained. This material was not removed since it is beyond the property lines of the site, and due to the risk of undermining the Main Street right-of way.

The laboratory results, quality assurance data, and chain-of-custody form for the samples obtained on August 8 and August 12 are presented on pages 15 - 18.

## Summary

Based on observations made during excavation activities and the results of the laboratory analyses, it is our conclusion that soil contamination related to the gasoline underground storage tank systems on the site has been remediated to Method A standards within the approximate property limits of the site.

We appreciate the opportunity to assist you in this matter. If you have any questions regarding this report or need additional services, please call.

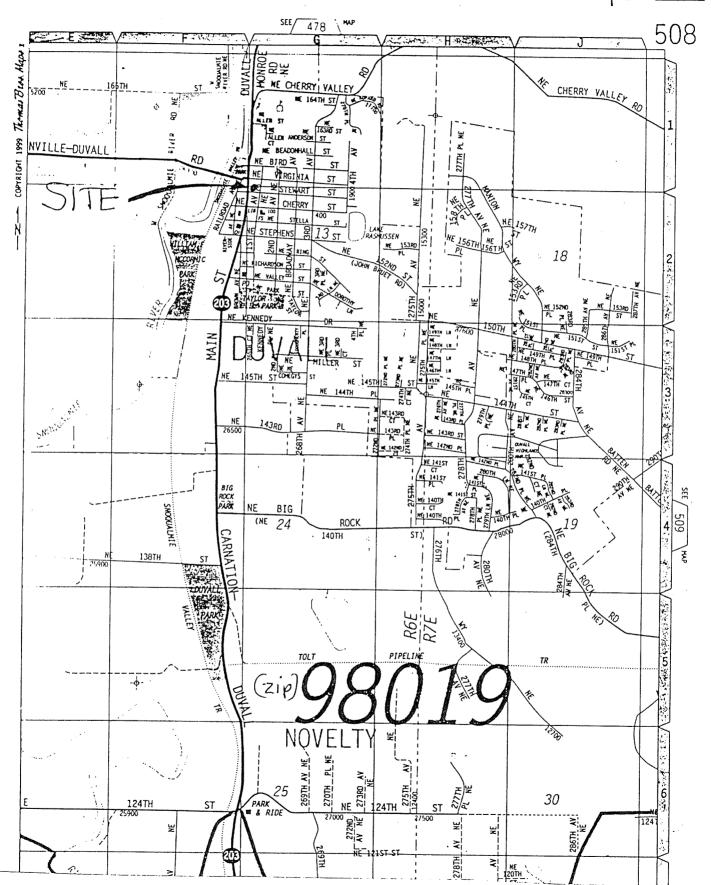
Respectfully submitted,

Daniel A. Wright

Certified Site Assessor

# VICINITY MAP

JOB 15802 MAIN ST. DUVALL, WA FILE NO. 479-01 BY D. WRIGHT \_\_ DATE 924/02 \_ of 20



WT SERVICES COMPANY P.O. BOX 906 • Seahurst, WA 98062 • (206) 242-9477

15802 MAINST, DUVALL JOB DUVALL MARKET SQUARE

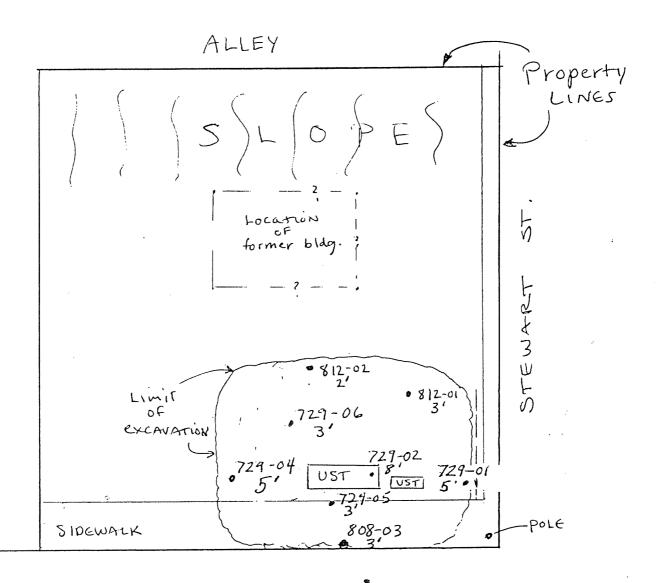
FILE NO. 479-01

BY D.A.W.

DATE 8-18-02

SHEET <u>5</u> OF <u>3.0</u>

# Site PLAN



MAIN ST (SR 203)

1 in = 20 ft.

Soil Sample No, \$ depth

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 9, 2002

Dan Wright, Project Manager WT Services Company PO Box 239 Seahurst, WA 98062

Dear Mr. Wright:

Included are the results from the testing of material submitted on July 29, 2002 from your Minaglia-Duvall project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0809R.DOC

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/31/02 Date Analyzed: 08/01/02

# RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 76-118)
729-01 d 207240-01	2.4	12	9.0	31	1,700	ip
729-02 207240-02	< 0.02	<0.02	< 0.02	< 0.02	<1	97
729-03 207240-03	< 0.02	< 0.02	< 0.02	< 0.02	<1	97
729-04 207240-04	<0.02	<0.02	<0.02	< 0.02	<1	88
729-05 207240-05	0.30	2.1	1.2	8.8 ve	540 ve	ip
729-06 207240-06	<0.02	0.08	0.10	1.7	140	99
Method Blank	<0.02	< 0.02	< 0.02	<0.02	<1	100
Method Blank	< 0.02	< 0.02	< 0.02	< 0.02	<1	98

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

d - The sample was diluted. Detection limits are raised due to dilution.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/31/02 Date Analyzed: 07/31/02

# RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

# Extended to Include Motor Oil Range Compounds

Results Reported on a Dry Weight Basis Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Diesel Extended</u> (C <sub>10</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 45-147)
729-01 207240-01	170	83
Method Blank	<50	84

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/30/02 Date Analyzed: 07/31/02

# RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Total Lead</u>
729-01 207240-01	6.1
729-02 207240-02	2.4
729-03 207240-03	2.6
729-04 207240-04	2.9
729-05 207240-05	5.1
729-06 207240-06	5.9
Method Blank	<2.0

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207150-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207150-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Black Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	98	98	34-136	0
Toluene	μg/g (ppm)	0.5	< 0.02	100	100	35-140	0
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	101	102	37-150	1
Xylenes	μg/g (ppm)	1.5	< 0.02	105	106	36-143	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	92	94	60-122	2
Toluene	μg/g (ppm)	0.5	94	96	60-126	2
Ethylbenzene	μg/g (ppm)	0.5	95	97	56-130	2
Xylenes	μg/g (ppm)	1.5	99	101	58-128	2
Gasoline	μg/g (ppm)	20	99	100	43-143	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207140-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207140-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	8\auh Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	60	62	34-136	3
Toluene	μg/g (ppm)	0.5	< 0.02	82	86	35-140	5
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	92	95	37-150	3
Xylenes	μg/g (ppm)	1.5	< 0.02	96	99	36-143	3

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	μg/g (ppm)	0.5	70	68	60-122	2
Toluene	μg/g (ppm)	0.5	96	92	60-126	4
Ethylbenzene	μg/g (ppm)	0.5	104	102	56-130	2
Xylenes	μg/g (ppm)	1.5	110	106	58-128	4
Gasoline	μg/g (ppm)	20	100	99	43-143	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

# QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 207207-03 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent Difference
Analyte	Units	Result	Result	(Limit 20)
Diesel Extended	μg/g (ppm)	<50	< 50	nm

Laboratory Code: 207207-03 (Matrix Spike)

			Blank	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	μg/g (ppm)	500	<50	116	122	60-187	3

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	μg/g (ppm)	500	105	67-140

 ${\sf nm}$  - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

# QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 207240-06 (Duplicate)

				Relative	
	Reporting	Sample	Duplicate	Percent	Acceptance
<u>Analyte</u>	Units	Result	Result	Difference	Criteria
Lead	μg/g (ppm)	5.9	5.0	17	0-20

Laboratory Code:	207240-06 (Mat	rix Spike	B(1)		
	Reporting	Spike	Sample	% Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Lead	ug/g (ppm)	20	5.9	74	50-150

Laboratory Code: Laboratory Control Sample % Recovery Reporting % Recovery Acceptance RPD Spike Analyte Units Level LCS LCSD Criteria (Limit 20) Lead μg/g (ppm) 20 103 101 80-120

# **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

e-mail: fbi@isomedia.com

August 20, 2002

Dan Wright, Project Manager WT Services Co. PO Box 239 Seahurst, WA 98062

Dear Mr. Wright:

Included are the results from the testing of material submitted on August 12, 2002 from your Minaglia-Duvall project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC

Michael Erdahl Project Manager

Enclosures NAA0820R.DOC

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/20/02 Date Received: 08/12/02 Project: Minaglia-Duvall Date Extracted: 08/13/02

Date Analyzed: 08/13/02 through 08/15/02

# RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as  $\mu g/g$  (ppm)

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 76-118)
0808-01 208060-01	0.04	0.29	0.13	0.55	37	97
0808-02 208060-02	< 0.02	< 0.02	< 0.02	<0.02	3	108
0808-03 <sup>208060-03</sup>	0.08	0.81	0.78	2.4	400 ve	98
0812-01 208060-04	< 0.02	< 0.02	< 0.02	<0.02	<1	111
0812-02 208060-05	<0.02	<0.02	<0.02	0.03	13	115
Method Blank	<0.02	<0.02	<0.02	< 0.02	<1	112

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/20/02 Date Received: 08/12/02 Project: Minaglia-Duvall

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207207-12 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207207-12 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	112	110	34-136	1
Toluene	μg/g (ppm)	0.5	< 0.02	106	104	35-140	1
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	103	102	37-150	1
Xylenes	μg/g (ppm)	1.5	< 0.02	111	110	36-143	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	102	100	60-122	2
Toluene	μg/g (ppm)	0.5	98	96	60-126	2
Ethylbenzene	μg/g (ppm)	0.5	96	95	56-130	1
Xylenes	μg/g (ppm)	1.5	103	104	58-128	1
Gasoline	μg/g (ppm)	20	107	116	43-143	8

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

puge 10 INF 8/12/02 01-2 TIME TURNAROUND TIME □ Dispose after 30 days□ Return samples□ Will call with instructions SAMPLE DISPOSAL Notes COMPANY ANALYSES REQUESTED アスト HEZ SAOCs py 8270 SAMPLE CHAIN OF CUSTODY **AOC8 PA 8560** PRINT NAME BLEX PY 8021B MINAGINA-DUV TPH-Gasoline SAMPLERS (signature) PROJECT NAME/NO. TPH-Diesel Sample Type | containers Jo# REMARKS 701  $\stackrel{\sim}{\sim}$ Phone # 106 215 - 6721 Fax # 20 6 242-947] City, State, ZIP Seah UV 55 WA 99062 Sevice ( Time Sampled SIGNATURE Date Sampled Relinquished by: Relinquished by: Receivedby Received by: Address 25 1304 236 . ID 70 03 99 0 2 Friedman & Bruya, Inc. Seattle, WA 98119-2029 3012 16th Avenue West Company () Clar 20-8086 Fax (206) 283-5044 Ph. (206) 285-8282 Sample ID SON 30 XO 10-2186 20-2180 Send Report To\_ 208060

DOD DOD SOUND SPRANT



# Release of Liability/Certificate of Disposal

**Kryger Construction** is released from liability for all petroleum contaminated soil originating from:

N.E. Corner of Stewart & Main Duvall, Wa

and transported to:

Rinker Materials, Northwest Division. 6300 Glenwood Ave. Everett WA 98203

From 08/08/2002 through 08/09/2002

Digua M. Hutchings

A total of 235.65 tons of petroleum contaminated soil were transported to the above facility. The material was treated and disposed of in the following manner:

Thermal Desorption/Landfill for Reclamation

Treatment/Disposal of the contaminated soil was performed in accordance with all applicable federal, state, and local laws and regulations.

Signed:

Date: September 13, 2002

Diana M. Hutchings

Inside Sales Representative Soil Remediation Division

JOB 15802 MAIN ST. DUVALL WA FILE NO. 479-01

BY Dan Wright DATE 9/24/02 SHEET 20 OF 20



Washington State
Underground Storage Tank
Site Assessment

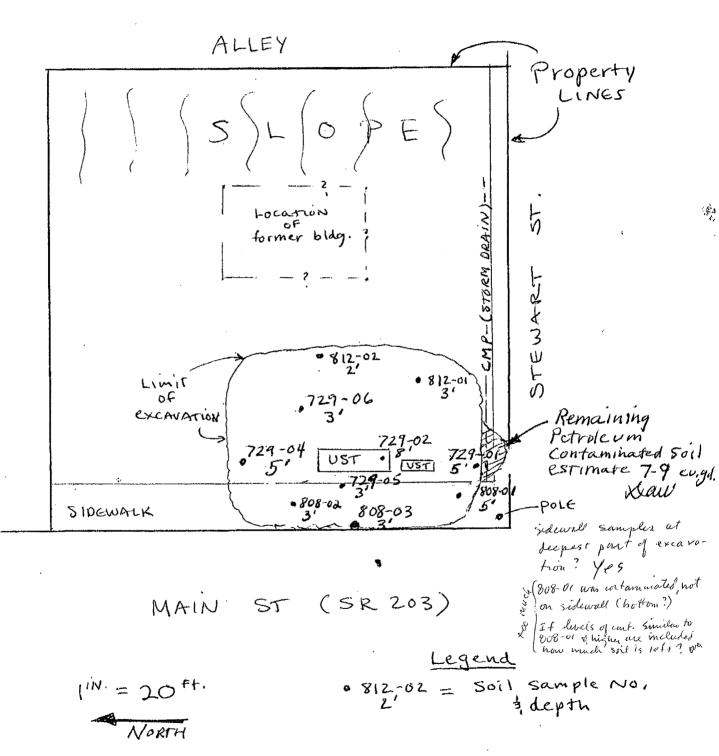
WRIGHT, DANIEL

has successfully completed the Washington State Competency Examination for Site Assessment of UST Petroleum Releases as required by WAC 173-360-600. Passing this exam demonstrates knowledge of regulations; standards, and practices pertaining to UST Site Assessment In Washington.

JOB DUVALL MARKET SQUARE
BY D.A.W. DATE 8-18-02 REVI

SOURCE - WT Services, 2002, Independent Cleanup Action Report

# Site PLAN



WT SERVICES COMPANY

P.O. BOX 906 • Seahurst, WA 98062 • (206) 242-9477

ATTACHMENT C 2008 HWA – MAIN STREET RECONSTRUCTION REPORT

October 27, 2008 HWA Project No. 2008-089

WH Pacific 3350 Monte Villa Parkway Bothell, Washington 98011

Attention:

Allen Prouty

Re:

SUPPLEMENTAL ENVIRONMENTAL SAMPLING FOR

CONTAMINATED SOILS

MAIN STREET RECONSTRUCTION

**DUVALL, WASHINGTON** 

## Dear Mr. Prouty:

At the request of WH Pacific and the City of Duvall, HWA GeoSciences, Inc. (HWA) collected additional soil samples along the Main Street Reconstruction project alignment to assist with characterizing, profiling, and disposing of suspected contaminated soils that were encountered during the utility installation project in Duvall, Washington.

#### SCOPE OF SERVICES

Based on the information provided and our current understanding of your requirements, HWA performed the following tasks:

- Collected soil samples in general accordance with the Washington Department of Ecology (Ecology) Guidance for Remediation of Petroleum Contaminated Soils (Ecology, 1995). Areas sampled included an existing soil stockpile and test pit along future utility excavations.
- 2. Submitted soil samples to an Ecology-accredited analytical laboratory for analyses in accordance with requirements of disposal facility, including (as needed):
  - Diesel and heavy oil range petroleum hydrocarbons by Ecology Method NWTPH-Dx
  - Gasoline range petroleum and aromatic hydrocarbons (benzene, ethylbenzene, toluene, xylenes) by Ecology Method NWTPH-Gx/BETX
- 3. HWA submitted the samples to the laboratory on the day of collection for analysis on a rush (1-2 day) turnaround basis.

#### SOIL SAMPLING AND ANALYSIS

HWA collected ten soil samples from five test pits excavated along the utility alignment at locations ahead of the current utility excavation. The test pits were excavated north of previously-sampled locations. The test pit locations are

19730 - 64th Avenue W. Suite 200 Lynnwood, WA 98036.5957

Tel: 425.774.0106
Fax: 425.774.2714
www.hwageo.com

included on Figures 1A and 1B, and are numbered based on adjacent survey stationing (TP-21+40, TP-22+00, TP-23+25), or proposed utility alignments in the case of two test pits completed west and east of Main Street ('Cable' and 'Joint Trench'). The 'Cable' test pit was completed approximately 50 feet west of the Main Street west fog line at approximate station 21+40. The 'Joint Trench' test pit was completed approximately 20 feet east of the Main Street east fog line at approximate station 21+50. The test pits were excavated to depths of four feet in the utility alignment and soil samples were collected at depths of two and four feet in each of the test pits. Shallow soils (less than three feet) typically consisted of mottled brown to gray silty sand fill soils, and deeper soils typically consisted of red-brown to gray silty sand. Root material and organic deposits were observed in some deeper soils.

The soil samples were submitted to CCI Analytical, an Ecology-accredited analytical laboratory in Everett, Washington.

Lube oil range petroleum was detected in one test pit sample, TP-23+25-2, at two feet below ground surface (110 mg/kg). Gasoline range petroleum was detected in one test pit sample, Joint Trench-4 at four feet below ground surface (5 mg/kg). These concentrations are below the respective MTCA Method A cleanup levels for oil and gasoline range petroleum (2,000 and 100 mg/kg, respectively). Ecology recommends that these soils ('Class 2') can be disposed of via backfill at the original site, fill in commercial or industrial areas, cover soils or fill at an offsite existing permitted municipal landfill, or road or parking lot construction material.

The analytical report is included as an attachment to this memorandum.

Based on these findings, and our understanding that these soils can not be used on site, HWA recommends off-site disposal of the stockpiled soils in accordance with the above end uses. Supplemental sampling should be conducted if field evidence of staining or odors is noted.

Thank you again for the opportunity to provide environmental consulting services to the City. Should you have any questions regarding this memorandum, or require additional services, please contact us at your convenience.

Sincerely,

HWA GEOSCIENCES, INC.

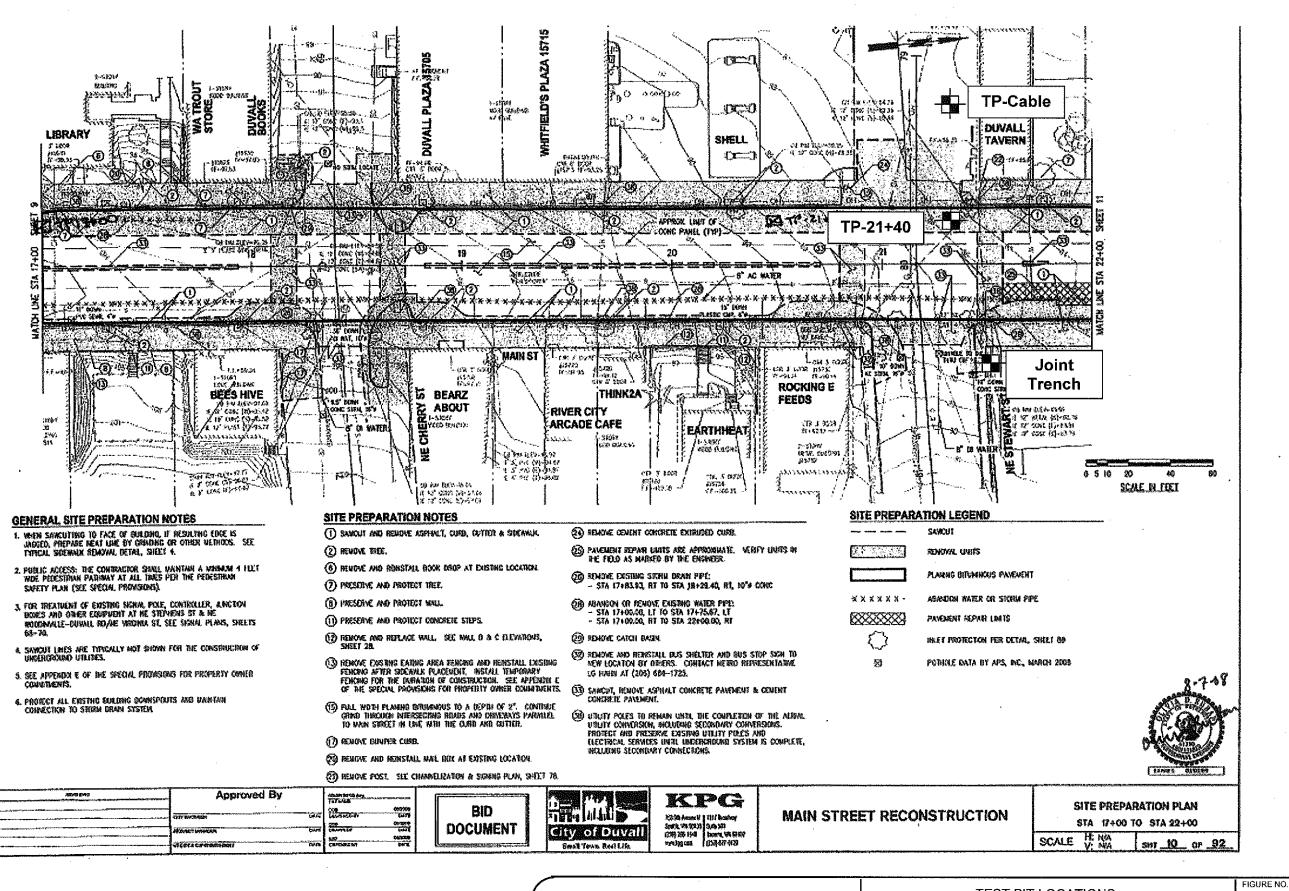
Arnie Sugar, LG, LHG

Vice President

Vance Atkins LG, LHG Senior Hydrogeologist

Attachments: Figures 1A and 1B - Test Pit Locations

Laboratory Analytical Results



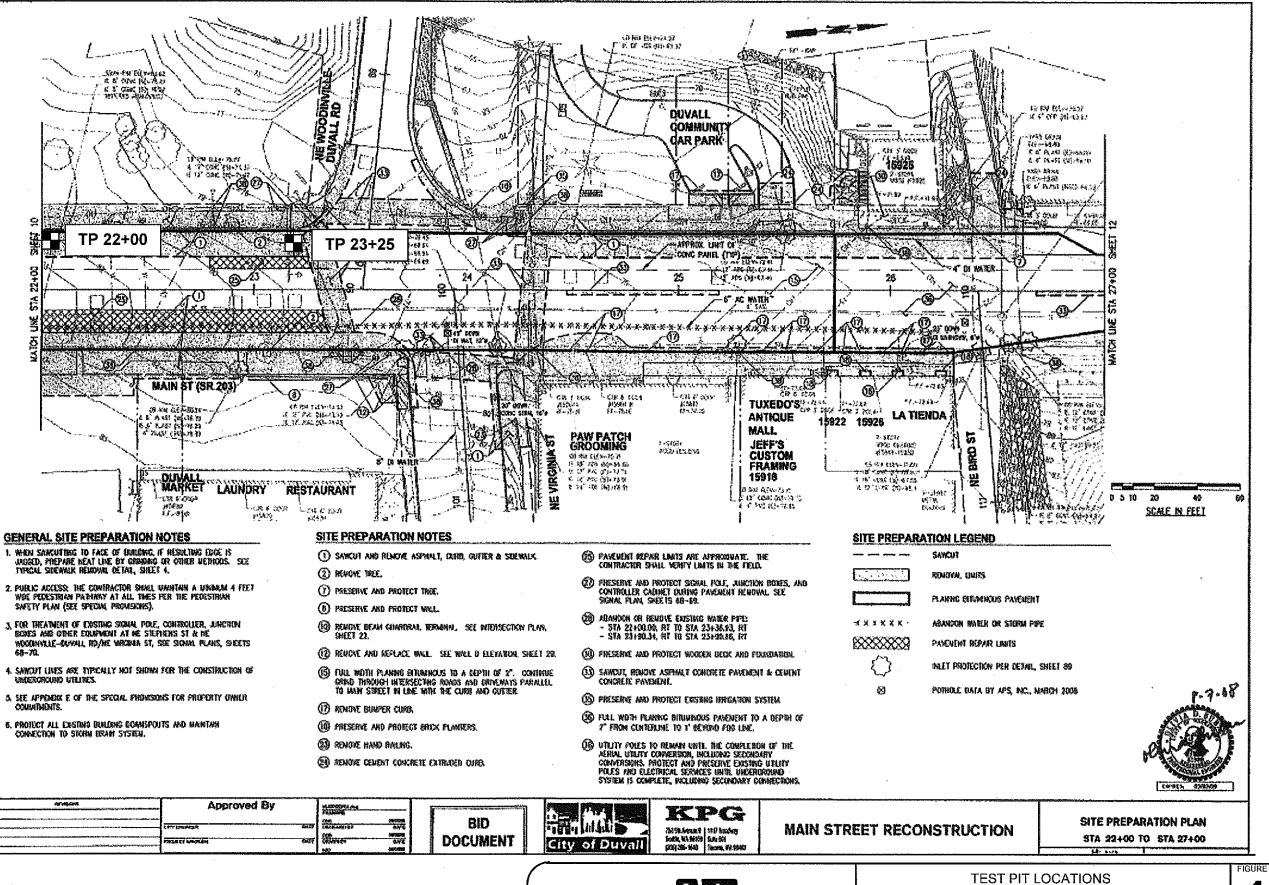
HWA GEOSCIENCES INC.

TEST PIT LOCATIONS

PROJECT NO.

MAIN STREET RECONSTRUCTION DUVALL, WASHINGTON

2008-089



MA BATE OF ATTE

**HWA GEOSCIENCES INC.** 

1 B

MAIN STREET RECONSTRUCTION DUVALL, WASHINGTON

PROJECT NO. 2008-089



**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

CCIL JOB #:

0810149

DATE RECEIVED:

10/24/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

VANCE ATKINS

CLIENT PROJECT ID: CLIENT SAMPLE ID:

DUVALL MAIN ST #2008-089 10/24/2008 9:45 TP-21+40-2

CCIL SAMPLE #:

-01

#### DATA RESULTS

ANALYTE TPH-Volatile Range	METHOD NWTPH-GX	RESULTS* ND(<3)	UNITS** MG/KG	ANALYSIS DATE 10/25/2008	ANALYSIS BY DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EBS

<sup>\* &</sup>quot;ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES,

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID: CLIENT SAMPLE ID:

DUVALL MAIN ST #2008-089 10/24/2008 9:50 TP-21+40-4

CCIL SAMPLE #:

-02

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS Date	ANALYSIS By
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EB\$

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>\*\*</sup> UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



CLIENT: HWA GEOSCIENCES

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID: CLIENT SAMPLE ID:

DUVALL MAIN ST #2008-089 10/24/2008 10:05 TP-22+00-2

CCIL SAMPLE #:

-03

#### **DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS By
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)*	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)*	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range TPH-Oil Range	NWTPH-DX NWTPH-DX	ND(<25) ND(<50)	MG/KG MG/KG	10/24/2008 10/24/2008	EBS EBS

<sup>\*</sup> REPORTING LIMIT RAISED DUE TO LOW % SOLIDS.

APPROVED BY:

Pol Bagan

<sup>\*&</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



**CLIENT: HWA GEOSCIENCES** 

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

DATE:

10/27/2008

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID: CLIENT SAMPLE ID:

DUVALL MAIN ST #2008-089 10/24/2008 10:10 TP-22+00-4

CCIL SAMPLE #:

-04

#### **DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/27/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/27/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/27/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EBS

<sup>&</sup>quot; "NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES,

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

DUVALL MAIN ST #2008-089 10/24/2008 10:20 TP-23+25-2

CLIENT SAMPLE ID: CCIL SAMPLE #:

-05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS Date	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	110	MG/KG	10/24/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LUBE OIL.

<sup>&</sup>quot; "NO" INDICATES AVALYTE AVALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



CLIENT: HWA GEOSCIENCES

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

DATE:

10/27/2008

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

VANCE ATKINS

CLIENT PROJECT ID:

DUVALL MAIN ST #2008-089 10/24/2008 10:30 TP-23+25-4

CLIENT SAMPLE ID: CCIL SAMPLE #:

-06

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/27/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/27/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/27/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EBS

<sup>\*\*</sup>ND\* INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



CLIENT: HWA GEOSCIENCES

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #: 10/24/2008

LYNNWOOD, WA 98036

C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID: CLIENT SAMPLE ID:

**DUVALL MAIN ST #2008-089** 10/24/2008 10:35 TP-CABLE-2

CCIL SAMPLE #:

-07

#### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)*	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)*	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	ND(<50)	MG/KG	10/24/2008	EBS

<sup>\*</sup> REPORTING LIMIT RAISED DUE TO LOW % SOLIDS.

<sup>\* &</sup>quot;NO" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



CLIENT: HWA GEOSCIENCES

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

CCIL JOB #:

0810149

LYNNWOOD, WA 98036

DATE RECEIVED:

10/24/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

DUVALL MAIN ST #2008-089 10/24/2008 10:40 TP-CABLE-4

CLIENT SAMPLE ID: CCIL SAMPLE #:

-08

### **DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/27/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/27/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/27/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/27/2008	DLC
TPH-Diesel Range	NWTPH-DX W/CLEANUP	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX W/CLEANUP	ND(<50)	MG/KG	10/24/2008	EBS

<sup>\* &</sup>quot;ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES,

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

CCIL JOB #:

0810149

LYNNWOOD, WA 98036

DATE RECEIVED:

10/24/2008

WDOE ACCREDITATION #:

C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

**DUVALL MAIN ST #2008-089** 

CLIENT SAMPLE ID:

10/24/2008 10:50 JOINT TRENCH-2

CCIL SAMPLE #: -09

DATA RES	<u>SULTS</u>
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ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS Date	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EBS

<sup>\*\*</sup>ND\*INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES.

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



#### CERTIFICATE OF ANALYSIS

CLIENT: HWA GEOSCIENCES

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

DATE:

10/27/2008

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

**DUVALL MAIN ST #2008-089** 

CLIENT SAMPLE ID: CCIL SAMPLE #:

10/24/2008 10:55 JOINT TRENCH-4 -10

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	5	MG/KG	10/25/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	10/25/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	10/25/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	10/25/2008	DLC
TPH-Diesel Range	NWTPH-DX	ND(<25)	MG/KG	10/24/2008	EBS
TPH-Oil Range	NWTPH-DX	ND(<50)	MG/KG	10/24/2008	EBS

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS UNIDENTIFIED GASOLINE RANGE PRODUCT.

APPROVED BY:

<sup>\*\*</sup>ND\* INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES,

<sup>&</sup>quot; UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS



#### · CERTIFICATE OF ANALYSIS

**CLIENT: HWA GEOSCIENCES** 

19730 64TH AVE. W. SUITE 200

LYNNWOOD, WA 98036

DATE:

10/27/2008

CCIL JOB #:

0810149

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008 C1336

CLIENT CONTACT:

VANCE ATKINS

CLIENT PROJECT ID:

**DUVALL MAIN ST #2008-089** 

#### QUALITY CONTROL RESULTS

#### SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0810149-01	NWTPH-GX	TFT	84
0810149-01	EPA-8021	TFT	71
0810149-01	NWTPH-DX	C25	101
0810149-02	NWTPH-GX	TFT	83
0810149-02	EPA-8021	TFT	68
0810149-02	NWTPH-DX	C25	98
0810149-03	NWTPH-GX	TFT	81
0810149-03	EPA-8021	TFT	66
0810149-03	NWTPH-DX	C25	87
0810149-04	NWTPH-GX	TFT	116
0810149-04	EPA-8021	TFT	100
0810149-04	NWTPH-DX	C25	8 <b>4</b>
0810149-05	NWTPH-GX	TFT	91
0810149-05	EPA-8021	TFT	76
0810149-05	NWTPH-DX	C25	91
0810149-06	NWTPH-GX	TFT	107
0810149-06	EPA-8021	TFT	89
0810149-06	NWTPH-DX	C25	98
0810149-07	NWTPH-GX	TFT	77
0810149-07	EPA-8021	TFT	60
0810149-07	NWTPH-DX W/CLEANUP	C25	83
0810149-08	NWTPH-GX	TFT	88
0810149-08	EPA-8021	TFT	86
0810149-08	NWTPH-DX W/CLEANUP	C25	76
0810149-09	NWTPH-GX	TFT	91
0810149-09	EPA-8021	TFT	75
0810149-09	NWTPH-DX	C25	91
0810149-10	NWTPH-GX	TFT	105
0810149-10	EPA-8021	TFT	78
0810149-10	NWTPH-DX	C25	95



#### CERTIFICATE OF ANALYSIS

**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

CCIL JOB #:

0810149

LYNNWOOD, WA 98036

DATE RECEIVED:

10/24/2008

C1336

WDOE ACCREDITATION #:

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

**DUVALL MAIN ST #2008-089** 

## QUALITY CONTROL RESULTS

#### **BLANK RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Soil	GS102308	0810149-01 to 10	TPH-Volatile Range	ND(<3)	MG/KG
EPA-8021	Soil	GS102308	0810149-01 to 10	Benzene	ND(<0.03)	MG/KG
EPA-8021	Soil	GS102308	0810149-01 to 10	Toluene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS102308	0810149-01 to 10	Ethylbenzene	ND(<0.05)	MG/KG
EPA-8021	Soil	GS102308	0810149-01 to 10	Xylenes	ND(<0.2)	MG/KG
NWTPH-DX	Soil	DS102408	0810149-01 to 10	TPH-Diesel Range	ND(<25)	MG/KG.
NWTPH-DX	Soil	DS102408	0810149-01 to 10	TPH-Oil Range	ND(<50)	MG/KG



#### CERTIFICATE OF ANALYSIS

**CLIENT: HWA GEOSCIENCES** 

DATE:

10/27/2008

19730 64TH AVE. W. SUITE 200

CCIL JOB #:

0810149

LYNNWOOD, WA 98036

DATE RECEIVED: WDOE ACCREDITATION #:

10/24/2008

C1336

CLIENT CONTACT:

**VANCE ATKINS** 

CLIENT PROJECT ID:

**DUVALL MAIN ST #2008-089** 

#### QUALITY CONTROL RESULTS

#### **BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS**

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	BLANK SPIKE RECOVERY	BLANK SPIKE DUP RECOVERY	RPD
NWTPH-GX	Soil	GS102308	0810149-01 to 10	TPH-Volatile Range	75 %	75 %	0
EPA-8021	Soil	GS102308	0810149-01 to 10	Benzene	107 %	110 %	3
EPA-8021	Soil	GS102308	0810149-01 to 10	Toluene	103 %	106 %	3
EPA-8021	Soil	GS102308	0810149-01 to 10	Ethylbenzene	97 %	100 %	3
EPA-8021	Soil	GS102308	0810149-01 to 10	Xylenes	102 %	105 %	3
NWTPH-DX	Soil	DS102408	0810149-01 to 10	TPH-Diesel Range	81 %	81 %	0

APPROVED BY:



**Chain of Custody** 

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DATE: 10/29/26

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HWA CONTACT: PHONE:	-   ~ o								
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ATTACHMENT D 2013 GLOBAL 2000 – PHASE I ESA



# PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

# Y.C.H. ENTERPRISE CORP. DUVALL MARKET SQUARE 1580 MAIN STREET NE DUVALL, WASHINGTON 98019

Prepared for:
KENNY XIONG
BBCN BANK
1155 North 130<sup>th</sup> Street
Suite 100
Seattle, Washington 98133

Prepared By:

Global 2000 Environmental Partners, LLC 18555 E. Smoky Hill Rd., Unit 461114 Aurora, Washington 80015 (303) 692-0600

> Ronald L. Battles Sr. Project Manager

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Appendix J: SBA Certification	

#### ENVIRONMENTAL CONSULTANT CERTIFICATION

May 31, 2013

To: Mr. Kenny Xiong

BBCN Bank

1155 N. 130th Street

Suite #100

Seattle, Washington 98133

Mr. Xiong:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 C.F.R. 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312 and ASTM 1527-05.

May 31, 2013, 2013

Date Ronald L. Battles, Sr. Project Manager

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitation of 40 C.F.R. Part 312 and ASTM E 1527-05 of 15820 Main St. NE, Duvall, WA, the property. Any exceptions to, or deletions from this practice are described in Section 3.4 and 3.5 of this report. We certify that the Phase I was performed by a qualified Environmental Professional meeting the requirements set forth in 40 C.F.R. § 312.10(b).

May 31, 2013

Date Principal of Consultant

**Project Information:** 15820 St. NE **Site Information:** 0.4973 acres M/L

**Latitude, Longitude:** N 47.7434000, W 121.9857000

Site Access Contact: Owner Access

General Field Notes: The property tenants provided unlimited access to the property. The business was found to be operating and in good condition on May 29, 2013. The business is a retail strip center (Duvall Market Square) and access was unrestricted. There were de minimis oil stains on the exterior asphalt and concrete pavement. No spills or releases were observed on the property. The interior of the building is in good condition and with minor chemical use or storage. There were no odors or evidence of mishandling of cleaning products. No hazardous waste is generated. The business is located in a mixed use area of Duvall, Washington with retail and commercial businesses located north, south and west. Residential housing is located to the east of the Subject Property. There is one Recognized Environmental Condition discovered by this investigation. An approved Voluntary Cleanup of petroleum hydrocarbon contamination and removal of two UST's was completed as required by regulations but cleanup, closure and final documentation was not filed with the state. The Voluntary Cleanup Approval by the state has expired and no closure letter or No Further Action letter has been issued for the site. Further Investigation and preparation of the documentation is required to close out the project. Additional certifications and verification may be required.

#### **Consultant Information:**

Global 2000 Environmental Partners, LLC 18555 E. Smoky Hill Road, Suite 461114 Aurora, Washington 80046

**Report Date:** 5/31/2013 **Inspection Date:** 5/29/2013



	AAI CRITERIA	SECTION(S)
1	Inquiry by Environmental Professional	1.0, Appendix E:
2	Interviews	8.0
3	Historical Review	6.4.1
4	Environmental Cleanup Liens	6.5
5	Federal, State, Local and Tribal Records Review	6.1
6	Visual Inspection of Property and Adjoining Property	7.0
7	Specialized Knowledge	5.1
8	Purchase Price vs. Property Value	5.2, Appendix F:
9	Commonly Known or Reasonably Ascertainable Information	2.4, 2.3
10	Degree of Obviousness and Ability to Detect Contamination	2.2



Report	t Section	No Further Action	REC	HREC	CREC	Comments
4.4	Current Use of Property	X				
4.6	Adjoining Property	X				
6.1	Std. Env. Records		X	X	X	Subject is an Open Cleanup Site under the Toxics Program ISIS Listing
6.4.1	Historical Summary		X	X	X	Petroleum Contamination NFA Closure Req'd
6.4.6	Environmental Reports	X	X	X	X	Previous Report Findings Limited Study Area
7.3.1	Hazardous Substances		X	X	X	Residual Petroleum Hydrocarbons Contamination
7.3.3	USTs	X				
7.3.4	ASTs	X				
7.3.5	Other Suspect Containers	X				
7.3.6	Equipment Likely to Contain PCBs	X				
7.3.11	Stained Soil/Stressed Vegetation	X				
9.1	Suspect Asbestos- Materials	X				Duvall Market suspect ceiling texture Out of Scope (BER)
9.2	Lead-Based Paint	X				None observed Out of Scope
9.3	Radon	X				Below Applicable Standard

BER – Business Environmental Risk (Remediation Risk Exposure – (2,230 sq. ft. @ \$3.50/sq.ft. = \$7,805 est.)



## PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT DUVALL MARKET SQUARE 15802 – 15820 MAIN STREET DUVALL, WASHINGTON 98019

#### 1.0 Executive Summary

Global Environmental Partners, LLC (GEP) is retained by BBCN Bank (lender) to perform a Phase I Environmental Site Assessment (ESA) Report of the subject property (Property) located at 15802 - 15820 Main Street, Duvall, Washington 98019. This study has been prepared in strict accordance with ASTM Standard Method E-1527-05, Small Business Administration Standard Operating Procedures (SOP 50.10.5) effective June 1, 2012 and EPA's All Appropriate Inquiry as promulgated in 40 CFR Part 312. GEP has not taken any exceptions to the procedures and has fully documented all research in this report.

The Property was developed and platted prior to 1917 and perhaps prior to 1900. The property contains five building structures, three larger buildings and two sheds. One of the buildings indicates an activity related to automobiles. In 1930 there are three buildings and a UST is identified as gas and oil on the southwest corner of the Property. In the 1950's the original buildings have been replaced by one building and a concrete pad in the vicinity of the UST installation. The data from the period of 1970 indicates that the property is vacant and the current Subject Building is constructed in 1974. The original occupants were small businesses and the Market Square grocery store is established before 1993. The Property has been used for grocery sales and restaurants since the 1990's.

The previous owner, Helmuth Schlueter, initiated a Voluntary Cleanup Program effort to remove the two UST's from the Property. Petroleum contaminated soil was found during the excavation of the tanks. There were no investigations to determine the vertical and horizontal extent of the contamination. It was found after removing the tanks that the contaminated soil extended under Main Street and under the adjacent sidewalk. The excavation of the soils would have undermined the structures causing significant damage. The communications with the agency personnel was discontinued after the owner decided to sell the Property. The VCP approval was withdrawn in 2006 and designated as a contaminated site containing toxics due to residual Benzene in the soil. This information was obtained from the Northwest Office of the Department of Ecology in Belleview, WA.

This ESA is performed on three tracts of land commonly known as 15802 - 15820 Main Street, Duvall, Washington 98019. The Property is identified as Parcel # 213070-0445-07, 213070-0460 and 213070-0470-05 and consists of 0.4975 acres M/L of land with a single story commercial retail building with a total area of 6,669 sq. ft. The only improvements to the land are the single story building, concrete and asphalt paved access/parking and natural vegetation along the east perimeter.

Ronald L. Battles of GEP inspected the Subject Property and nearby properties in accordance with ASTM



Standard E-1527-05 on May 29, 2013, to determine and identify Recognized Environmental Conditions (REC's) in accordance with the Standard. Interviews were conducted with neighboring tenants, adjacent property occupants/owners, property real estate agent(s), the property owner and regulatory agency officials during the period March 27 thru May 4, 2013. All the facts contained in this report have been verified with knowledgeable and reliable sources of information.

Historical aerial photographs, ownership records and directories were used to review the history of the Subject Property. Visual observations were used to confirm the historical conclusions and determine the current condition of the property. Federal, state and local regulatory databases and agency contacts were used to determine the past involvement of the subject property and potential for off-site contamination impacting the subject property. Personal interviews have been used to determine agency concerns about the environmental regulatory compliance status of the Property. A documented interview with the current tenants of the Property has memorialized any potential environmental contamination issues resulting from past and current use of the property.

The historical ownership records were reviewed to 1989 in limited title work prepared by GEP. According to the reverse business directories for the period 1996 to present, it is believed that the subject property was automotive related businesses from 1917 to 1970. The earlier buildings were razed but the UST's were left in place. The new building was constructed in 1974 and the Property has been used as office space, commercial businesses, restaurant facilities and a grocery store. The county and city records were not reviewed prior to 1970 and no public information was readily available prior to 1995. Aerial photographs are poor prior to 1941, however, the Property is identified in the 1941 aerial. There is no history of hazardous waste generation, onsite hazardous or solid waste storage., There is a documented release of hazardous/petroleum hydrocarbons to the soil from the previous subject businesses. The 1917 maps indicate that the property was occupied land prior to 1917. The Washington Department of Labor and Employment was consulted for historical uses and there is no indication of the property being used for gasoline sales, UST's, AST's or any other purpose associated with oil companies. There are no environmental permits registered for the site address. In accordance with the King County Treasurer's records, there is no history of liens for the property. A Hazardous Substances Certificate and Indemnity Agreement has been executed and filed by the lender for the Property.

The Environmental Data Resources, Inc. environmental regulatory database for the subject property indicates that there are no NPL sites, no CORRACTS sites, no TSD/CORRACTS sites and no SPL sites within a one mile radius. There are one CSCSL (CERCLIS) site, no TSD sites, one LUST sites (closed site), no SWLF sites and no public drinking water wells within one-half mile radius of the subject property. The Subject Property is designated as a CSCSL site. Within one-quarter mile there are no RCRA Violation sites, no TRIS sites and two registered UST/AST sites. There are no ERNS sites, no RCRA Conditionally Exempt Generator, no Small Quantity Generators, no reported SPILLS sites and no RCRIS Notifiers sites within 1/8 miles. There are two Historical Auto Stations and one Historical Cleaners within ½ mile of the Subject Property. There is no record of environmental contamination related to the historical use of nearby properties. The agency records for each of the identified sites were reviewed by GEP to determine the environmental impact of the various businesses. None of the businesses have adversely impacted the Subject Property or the adjacent properties. Furthermore the adjacent properties were inspected during the investigation of property uses and none of these businesses generate hazardous waste or store petroleum hydrocarbon products. The Subject Property has not been



adversely impacted by these nearby businesses.

Based on GEP's investigation of the subject Property it is our Professional Opinion that there are no Recognized Environmental Conditions associated with the current uses of the premises. GEP's investigation of adjacent and nearby properties within the ASTM search radii indicates that the Subject Property has not been adversely impacted by the adjacent or nearby businesses. There is one Recognized Environmental Condition (REC's) for the Subject Property and therefore Global Environmental Partners recommends Further Investigation is required.

### 1.1 Subject Property Description

Global 2000 Environmental Partners, LLC (GEP) has performed a Phase I Environmental Site Assessment (ESA) in general accordance with ASTM 1527-05 for Parcels 1, Parcel 2 and Parcel 3 (the "Property") representing the Property located at 15802 - 15820 Main Street respectively, Duvall, Washington. The Phase I ESA is designed to provide the Client with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the Property. This assessment was conducted utilizing generally accepted ESA industry standards in accordance with ASTM E 1527-05, Standard Practice for ESA's: Phase I ESA Process. The Property is currently developed and zoned for commercial businesses. The property consists of approximately (21,669 sq.ft.) 0.4975 acres with minor landscape contouring to alleviate stormwater drainage and potential soil erosion. There is a total of 6,669 sq. ft. in a two story pitched roofed concrete block building located on Parcel 3 of the property. Access to the property is limited to driveways along W. 46<sup>th</sup> NE Virginia Street and Main Street. The Property is situated within a commercial business area in north Duvall, Washington. The property is not located in a 100 year or 500 year floodplain region. There are no ponds or wetlands located on the property.

The Property is further described as follows:

<u>Parcel 1:</u> The Subject Property is commonly identified as 15802 Main Street, NE, Duvall, Washington. The Property is legally described as Lots 9 thru 11 and a portion of the south side of Lot 12, Volume 19 of Plats, Page 47, King County Reception #20080417001528.

<u>Parcel 2:</u> The Subject Property is commonly identified as 15810 Main Street, NE, Duvall, Washington. The Property is legally described as the north portion of Lot 12, Volume 19 of Plats, Page 47, King County.

<u>Parcel 3:</u> The Subject Property is commonly identified as 15820 Main Street, NE, Duvall, Washington. The Property is legally described as Lots 13 thru 16, Volume 19 of Plats, Page 47, King County Reception #20080417001528.

## 1.2 Data Gaps

GP has been able to research the use and ownership of the Subject Property back to 1887 with previous Phase I Environmental Site Assessment prepared by Envitech on February 29, 2008 (Parcel 3 only) Sanborn Maps and



topographic maps (limited data) and thoroughly from 1974. No information was found for the use of the property prior to 1917. The Envitech ESA investigated the property with Sanborn Maps to 1887 as vacant land. Limited data is available for this property beyond 35 years, however, there are additional data limitations for records retention greater than 20 years by most agencies. The Duvall Fire Department only retains 10 years of data for inspections and emergency responses. This report is developed using available data which has been confirmed as accurate for the Property.

## 1.3 Environmental Report Summary

GEP obtained and reviewed a database report from Environmental Data Resources, Inc. for the Property and the surrounding area. Based on the database report, no up-gradient sites were identified as potential concerns to the Subject Property. This opinion is based on a complete review of agency records for the listed up-gradient and cross-gradient businesses.

Report Section		No Further	REC	HREC	Issue/Further	Comments
		Action			Investigation	
4.4	<b>Current Use of</b>			X	X	Open VCP and
	Property					ISIS Toxic Listing
4.6	Adjoining	X		X		Valley Shell
	Property					Closed LUST site
	Information					
6.1	Standard	X				CSCSL"(state
	Environmental					CERCLA Site)
	Records					& Allsites list
	Sources					Hazardous
						Waste/Contaminated
						Site
6.4.1	Historical	X				
	Summary					
6.4.6	Other	X				WT Services (2002)
	Environmental					Envitech P1 ESA
	Reports					(2008)
7.3.1	Hazardous			X	X	2 Petroleum
	Substances					Hydrocarbons
						UST's
7.3.3	USTs	X		X		
7.3.4	ASTs	X				
7.3.5	Other Suspect	X				
	Containers					



7.3.6	Equipment Likely to Contain PCBs	X	X	Out of Scope Lighting Ballasts
7.3.11	Stained Soil/Stressed Vegetation	X		De minimis vehicle staining from customer parking evidenced.
9.1	Asbestos-Cont aining Materials (Suspect – No Testing)	X		Out of Scope Duvall Market suspect floor tiles & spray on ceiling texture
9.2	Lead-Based Paint	X		None observed
9.3	Radon	X		Within compliance range

#### 1.4 Recommendations

GEP has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-05 of the Duvall Market Square property, 15802 - 15820 Main Street, Duvall, Washington 98019. Any exceptions to or deletions from this practice are described in Section 1.4 of this report.

The Subject Property is identified in the Washington Department of Ecology ISIS database as a state Hazardous Waste/Contaminated site under the state CERCLIS category. The listing is the result of an incomplete Voluntary Cleanup Action which was initiated in 2002 by the property owners, John Schueter and William Minaglia, and WT Services Company, the environmental consultant. Two UST's were removed from the property at 15802 Main Street from a previous gasoline and diesel fuel UST installation. The owner of the UST's has not been identified and a full Chain of Title search should be undertaken to determine the period of use. In addition WT Services did not perform a site assessment survey to delineate the vertical and horizontal extent of the contamination. As stated by WT in the Independent Cleanup Action Report dated September 24, 2002, residual contamination in the side walls of the excavation were not removed. The removal was not continued due to the proximity of sidewalks and roadways. These structures would have been compromised causing additional project costs and an unsafe condition. The remaining soil exceeds the state Model Toxics Control Act (MTCA) Method A cleanup levels. In addition the impact from the leaking UST's on the groundwater was not determined which is a requirement of state and federal regulations to prevent willful endangerment to the public.

According to the agency coordinator, Kari Peterson, the property owner did not continue to provide reports on the remediation activities to remedy the residual contamination which was removed by WT Services. The environmental consultant removed two UST's from the site and backfilled the excavation with clean fill. This



action substantially removed the source of the contamination but this is not adequate to prove that the removal was effective. The last correspondence was a phone log with Dan Wright, WT Project Manager, discussing the need for a NFA letter and project alternatives including a new consultant. The VCP authorization given to Mr. Schueter in 2002 was canceled in 2006 for not following up with additional site investigation action or justification for leaving contamination on the property.

The owner (or responsible party) is required to submit a report in compliance with state regulations and agency imposed requirements discussing the findings of a current subsurface investigation. The submitter must also request an opinion concerning any residual contamination remaining on the site. Also the owner can request a NFA letter with a justification for the request and limited additional investigations on the site eg. a toxic risk assessment, economic reasonableness justification, or additional soil characterization. The Project Manager for the Washington Department of Ecology is Joe Hickey and he would coordinate the reauthorization of the VCP and the Opinion for a continued site investigation or approval.

This is a Recognized Environmental Condition (REC) resulting from the past use of the Property. The unresolved issue requires action by the property owner or responsible party. There are no additional ASTM REC's identified on the Subject Property (Parcels 1, 2, & 3).

#### 2.0 Introduction

## 2.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions, as defined by ASTM Standard E-1527-05, in connection with the Property. GEP understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Property.

## 2.2 Scope of Work

The Scope of Work for this ESA is in general accordance with the requirements of ASTM Standard E 1527-05. GEP warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. No other warranties are implied or expressed.

#### 2.3 Significant Assumptions

There is a possibility that even with the proper application of these methodologies there may exist on the Property, conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. GEP believes that the information obtained from the records review and the interviews concerning the site is reliable. However, GEP cannot and does not warrant or guarantee that



the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide the client with information relating to the Property.

## 2.4 Limitations and Exceptions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM 1527-05. Specific limitations and exceptions to this ESA are more specifically set forth below:

GEP does not take any exceptions to the ASTM procedure in the completion of this study.

#### 2.5 Deviations

There were no deviations from the Scope of Work.

#### 2.6 Special Terms and Conditions

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the client. No subsurface exploratory drilling or sampling was done under the scope of this work. Unless specifically stated otherwise in the report, no chemical analyses have been performed during the course of this ESA. Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

#### 2.7 Reliance

All reports, both verbal and written, are for the benefit of Mr. Chinkuk Yi, the property owner and BBCN Bank, the lender as identified to GEP. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of GEP.

#### 3.0 Site Description

## 3.1 Location and Legal Description

The subject Property is generally located in north Duvall, Washington along the east side of Main Street NE, north of NE Stewart Street and south of NE Virginia Street. The subject property consists of three parcels of land comprising Lots 9 thru 16 inclusive. The improvements consist of a single split level building identified as 15820 Main Street NE in a mixed use zone area of Duvall, Washington. The Subject Building is identified in the Tax Assessors records as a single story concrete block building with a total of 6,744 sq. ft. The subject land is legally described as a parcels of land located in NW quarter Section of Section 13 Township 26 Range 6, King County, Washington. The parcel is additionally described in the



Tax Assessor records as Account #213070-0445-07, #213070-0460-07 and #213070-0470-05, City of Duvall, King County, State of Washington. The property has been assigned the address of 15802 - 15820 Main Street, Duvall, Washington 98019.

According to the King County Assessors records, the Property is currently owned by YCH Enterprise Corp., 600 128<sup>th</sup> Avenue NE, Bellevue, WA. The current title is the result of a Warranty Deed which was titled to the current owner.

## 3.2 Activity/Use Limitations

There are no activity or use limitations for the Property. Furthermore, there are no deed restrictions or Environmental Liens filed for the Property. There is a Hazardous Substances Agreement between Y.C.H. Enterprise Corporation and Pacific International Bank on Lots 9 thru 16, Block 9, Volume 19 of Plats, Page 47. The Agreement is an Indemnification document for the benefit of the lender and limits the lender's liability relative to Hazardous Substances located on the Property.

#### 3.3 Site and Vicinity Description

The Property is located in a commercial business area that is characterized by numerous retail businesses. There are residences nearby to the east. Commercial properties are located to the north, south and west. This area of Main Street has been established with businesses since at least the early 1900's as evidenced by the Sanborn Fire Insurance Maps. The Property is zoned as Commercial land and platted in accordance with King County zoning requirements for this business lot size.

## 3.4 Current Use of Property

At the present time, the Property is developed as a commercial retail business building. There is very limited natural landscaping and the remainder of the land is improved with the commercial building and asphalt paving.

#### SITE OCCUPANTS

Tenant Name	Location	Type of Use	Comments
Vacant Parking Lot	15802 Main Street NE	Business Access and	Concrete Building Pad
		Parking	from previous building
		Asphalt Paved	located on Parcel
Vacant Area	15810 Main Street NE	Business Access and	Asphalt Paved
		Parking	



Duvall Market	15820 Main Street, Ste A	Grocery Store	No REC;s Observed
Princess Nails	15820 Main Street, Ste B	Nail and Waxing Salon	No REC's Observed
Pho's Thailand Rest.	15820 Main Street, Ste C	Restaurant	No REC's Observed

## 3.5 Description of Structures and Other Improvements

The improvement located on the Property is a single story split level building. The concrete block 6,744 sq.ft. building is constructed with modern materials including drywall partitions, asphalt shingle roof, concrete block on a concrete slab building. The street level of the building is occupied by the three tenants and a fourth storage room is located in an elevated portion of the building on the east side of the structure. Access to the storage room is from an adjacent alley on the east side of the building and elevated above the Main Street elevation.

The building was constructed in 1974 as a retail grocery market. The building is located on approximately 0.4975 acres of property with a slope to the west towards Snoqualmie River. The property has a small strip of natural landscaping along the southeast perimeter and asphalt/concrete paving on the remainder of the property. There are no other improvements located on the Property.

## **Property Improvements**

21 openty intproventents	
Size of Property (approximate)	Approximately 0.4975 acres M/L
General Topography of Property	Approximately 74 feet above mean sea level (MSL). Sloping gently
	to the west.
Adjoining and/or Access/Egress Roads	Access to Main Street to the west and Virginia Street to the west via
	asphalt paved driveway. The Property is adjacent to Stewart Street
	to the north without access.
Paved or Concrete Areas (including	Asphalt and concrete paved access road and parking along the west
parking)	side of the building with additional parking in the partially
	improved area to the north.
Unimproved Areas	There are no open unimproved areas.
Landscaped Areas	No landscaping per se is located on the property. Limited natural
	vegetation is along the southeast perimeter.
Surface Water	There is no surface water or ponds located on the Property.
Potable Water Source	City of Duvall Water District
Sanitary Sewer Utility	City of Duvall Wastewater District
Storm Sewer Utility	City of Duvall Stormwater District
Electrical Utility	Puget Sound Energy
Natural Gas Utility	Puget Sound Energy



## 3.6 Adjoining Property Information

During the vicinity reconnaissance, GEP observed the following land use on properties in the immediate vicinity of the Property.

Direction From Site	Occupant	Use	Comments
North	Tuxcedo's Antiques	Retail Sales of	No Concerns.
	Mall	Antiques	
Northeast	Duvall Place Apts.	Residential	No Concerns
Tiornicast	Buvan race ripus.	Residential	Two Concerns
South	Rockin "E" Fweeds	Retail animal and	No issues observed or recorded for the
		livestock feed store	property.
East	Residential Housing	Residential	No observed environmental problems
			_
Adjacent East	Closed drive-thru	Abandoned	No REC's or problems observed. No
Across Alley ROW	carwash 2 bays		record of building or use period.
West	Vacant Land and	No Use	No issues observed on the property.
W CSI	residential housing	110 056	140 issues observed on the property.
	Duvall Tavern	Vacant Bldg.	Bldg. for sale
Southwest	Valley Shell "C"	Retail gasoline and	Closed LUST site
	Store	food sales	

## **4.0 User Provided Information**

The property owner was interviewed to complete an Environmental User Questionnaire. The document was completed by GEP, LLC based on observations and discussions with the property owner. This document is included in Appendix I. The owner is not aware of any current environmental concerns which would result in a Recognized Environmental Condition on the subject Property.



## 4.1 Specialized Knowledge

GEP has no specialized knowledge of the subject property outside of the research which was conducted and reported as part of this report.

The property tenants were interviewed as part of this investigation. The property has been used as a food market and restaurant property since construction in 1974. The tenants are not aware of any past history beyond a few years.

#### 4.2 Valuation Reduction for Environmental Issues

GEP has not been provided with an appraisal for the subject property. A review of the King County Assessor's office appraisal value indicates a 2013 value of \$1,180,000.00 for the entire property (Lots 9 thru 16 with Improvements) based on comparable area sales. In our opinion the value of the subject property is stable in value at this time. The owner purchased the property for an undisclosed amount in 2002. In our opinion the property should be fairly valued in excess of \$1,000,000.00 after consideration for a stablizing economy and building improvements made since purchase. There is no reported reduction from the asking price for environmental issues. The property is in good condition and no environmental remediation costs have been assigned to the property. This suggests that the property has not been devaluated as a result of environmental liabilities. The Business Environmental Risk (BER) estimate is for the correction of reporting deficiencies under the state Voluntary Cleanup Program for UST removal in 2002. The projected BER cost is less than \$25,000.00 for the entire project.

## 4.3 Owner, Property Manager, and Occupant Information

The current tenants of the property were interviewed at the subject site. The property is operating, occupied and used by the tenants. The rental property is not occupied by the owner. The regulatory compliance deficiency is the result of an incomplete site investigation and contaminated soil removal action by the environmental consultant. The owner, Helmuth Schlueter, attempted to close the site unsuccessfully. Additional work was required to assess the health risk associated with leaving petroleum contaminated soil exceeding the state MTCA Method A cleanup levels on the Property.

#### 4.4 Reason For Performing Phase I

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-05) in connection with the Property. GEP understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Property. This ESA is performed to comply with lender and SBA requirements for a current investigation. GEP is aware of a Phase I ESA prepared by Envitech, LLC dated February 29, 2008 for Pacific International Bank in anticipation of property financing. The Phase I ESA was performed on Parcel 3 (Lots 13 thru 16) of this study. In addition a Phase III Cleanup Action Report was prepared by WT Services Company on September 24, 2002 discussing the removal of two UST's and contaminated soils from the Property.



#### 5.0 Records Review

#### 5.1 Standard Environmental Records Sources

Information from standard Federal and state environmental record sources was provided through Environmental Data Resources, Inc. (EDR) from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The EDR report was prepared on May 22, 2013. This integrated database also contains postal service data in order to enhance address matching. Records from one government source are compared to records from another to clarify any address ambiguities. The demographic and geographic information available provides assistance in identifying and managing risk. The accuracy of the geocoded locations is approximately +/-300 feet.

In some cases, location information supplied by the regulatory agencies is insufficient to allow the database companies to geocoded facility locations. These facilities are listed under the Unmapped Sites section within the EDR report. A review of the Unmapped facilities indicates that none of these facilities are within the ASTM minimum search distance from the Property.

Regulatory information from the following database sources regarding possible recognized environmental conditions, within the ASTM minimum search distance from the Property, was reviewed. This data is included in the table below. The current EDR report is included in Appendix D.

Database List	Subject Property Listings	Total Number of Listings	Environmental Concern Posed to the Subject Property
Federal NPL Sites (< 1 mile)	0	0	No
Federal CERCLIS Sites (< 0.5 mile)	0	0	No
Federal CERCLIS NFRAP Sites (Property &	0	0	No
Adjoining)			
RCRA CORRACTS Sites (< 1 mile)	0	3	No
RCRA TSD Facilities (< 0.5 mile)	0	0	No
RCRA SQG (<0.25 mile)	0	0	No
RCRA LQG (Target & Adjacent)	0	0	No
Federal ERNS Sites (Target Property Only)	0	0	No
ICR Voluntary Cleanup Site (<0.5 mile)	1	2	Yes
State HW Sites (< 1 mile)	1	8	Yes
State CERCLIS Sites (< 0.5 mile) CSCSL	1	1	No
Landfill/SW Disposal Sites (< 0.5 mile)	0	0	No
LUST Sites (< 0.5 mile)	1	2	Yes
UST/AST Sites (Property & Adjacent)	0	2	No



Unmapped Orphan Sites	0	7	No

## DATABASE PROVIDER COMMENTS (SUBJECT ONLY)

Site Name:	Duvall Market Square
Databases:	Listed as a LUST Site, a State HW Site and a ICR Voluntary Cleanup Program Site
Address:	15802 - 15820 Main Street
Distance:	Subject Property
Direction:	N/A
Elevation:	74 ft. ASL
Comments:	The Subject Property is identified as an Open LUST site, a Voluntary Cleanup Program
	site, and a state Hazardous Waste Site (state CERCLIS equivalent)

#### **5.2 Additional Environmental Record Sources**

#### Washington Department of Ecology (WDE), Northwest Regional Office, Belleview, WA

Contact: Public Records Section; – Cherie Gritsch *Phone*: (425) 649-7235 *Findings*: The following reports were reviewed at the agency offices: An Independent Cleanup Report (ICR) prepared by WT Services for a UST removal of two historical fuel tanks located on the property address 15802 Main Street and identified as the Duvall Market Square. In addition to the report there is an application for a Voluntary Cleanup Program designation for the site. There is correspondence and phone logs relative to the removal action and a discussion of further action including periodic reports for the continued investigation and remediation of the site. There is also a letter that cancels the VCP designation. The site is then listed in the AllSites report as a Contaminated or Toxic site that is in the remediation phase and an Open Site for regulatory enforcement action. The Property is also listed in the CSCSL category of contaminated sites which is the state equivalent of the federal CERCLIS designation. The Property is also considered an Open LUST Site for regulatory classification of required actions to close the site and obtain a No Further Action designation. An additional file search was requested from the agency on behalf of our client to conclude this phase of the assessment.

**VCP Coordinator:** Kari Peterson (425) 649-7000 of the Voluntary Cleanup Program (VCP) Department was contacted concerning the VCP status of the project site. GEP was advised that the site was dropped from the program because there were no follow up reports from the owner to advise the agency of new progress on the site remediation and closure. The owner or the responsible party must reapply to the agency to participate in the VCP and close the site without state intervention. The VCP Project Manager for the site is Joe Hickey of the VCP group.

Records Reviewed Under this Study: VCP files, ICIS program file, CSCSL for Hazardous Substances Sites, LUST records identifying the Property, the ALLSITES file, the ICR file of the VCP records. A complete list of files researched is listed in the EDR Radius Map Report dated May 22, 2013.



## City of Duvall Public Works Building Department

**Contact:** Receptionist **Phone:** (425) 788-0311 **Findings:** Department representative was not aware of any issues with the subject property. The building records were from 1991 to present. Subsequent to last recorded construction in 1974 only minor improvements and repair permits were issued for the commercial building. There is no record of UST's installed on the property and no demolition permits for prior structures or asbestos abatement. The City's records do not include installations over 20 years ago.

## City of Duvall Water and Wastewater District (Public Works Dept.)

*Contact:* Receptionist *Phone:* (425) 788-3434 *Findings:* The files clerk was not aware of any issues with the subject property.

#### **Puget Sound Energy (for PCB information)**

**Contact:** Engineering Dept. **Phone:** (888) 225-5773 **Findings:** The pole mounted transformer located on the subject property was installed in 1974. The transformer is not labeled and therefore is presumed to be PCB Contaminated. The transformer is in good operating condition and without any signs of leakage or physical damage.

## **City of Duvall Fire Protection District**

**Contact:** Receptionist/Joel Kuhnhenn **Phone:** (425) 788-1625 **Findings:** The fire department records were reviewed for the period 2001 to present. No incidents or UST's have been recorded for the Subject Property address since records have been retained. The only records were for four medical emergency calls and one report for water damage from a leaking roof.

## King County Assessor's Office - Property Tax Files

**Contact:** Receptionist **Phone:** (206) 296-7300 **Findings:** The Assessor staff was not aware of any issues with the subject property. They provided assistance with property details, valuation and limited sales information. Basic Chain of Title information was obtained from the agency. Document copies were obtained from the Clerk and Recorders office. There are no liens or Superliens against the property.

#### **5.3 Physical Setting Sources**

The United States Geological Survey (USGS), Quadrangle Carnation Washington Quadrangle 7.5-Minute series topographic maps were reviewed for this ESA. This map was published by the USGS in 1993. In addition, soil survey information for the Subject Property was prepared by EDR based on historic data. There are no unusual characteristics. The soil consists of a gravely loam and sandy loam to a depth of 5' BGS. Silty loam to silt-clay to a depth of 12' BGS. Groundwater is anticipated below 69" and can be intercepted at 9' BGS. A review of the Flood Insurance Rate Maps, published by the Federal Emergency Management Agency, was also performed as part of the research on the Subject Property. The Subject Property does not lie in a 100 year or 500 year



## floodplain.

## **USGS Topographic Maps 6.3 Physical Setting Sources (continued)**

Date:	1993		
Quad ID:	Carnation	Washi	ington Quadrangle
Ft. Above MSL:	74' BGS		
Latitude:	47.743400	0	
Longitude:	121.98570	00	
Anticipated GW Flo	Anticipated GW Flow Direction: WNW		
Distance to SW Boo	stance to SW Bodies: Approx. 0.25 mile to the west		
Site Land Use:			
The property is depicted as commercial retail property.			
Adjoining Properties Land Use:			
The properties located adjacent to the subject Property are identified as commercial businesses and			
consists of commerc	consists of commercial and retail sales, food & entertainment services.		

Additional topographic information is contained in the SAR prepared by EDR, Appendix D.

## 5.3.1 Topography

The United States Geological Survey (USGS), CarnationWashington Quadrangle 7.5-Minute series topographic map was reviewed for this ESA. This map was published by the USGS in 1993. According to the contour lines on the topographic map, the Property is located at approximately 74 feet above mean sea level (MSL). The contour lines in the area of the Property indicate the area is sloping to the west northwest. The property is depicted as developed commercial retail property.

## **5.3.2 Surface Water Bodies**

The nearest surface water in the vicinity of the Property is the Snoqualmie River which is located approximately 0.25 mile to the west of the Property. No surface water is located on the Property.

A review of the Flood Insurance Rate Maps, published by the Federal Emergency Management Agency, was performed. According to Panel Number 53033C0401F, dated August 23, 2001; the Property is located in Zone Q3 and is not in a 100 year flood plain. It is also located outside the 500 year designation.



## 5.3.3 Geology and Hydrology

A review was made of available published geologic and groundwater information obtained from the "Geologic Map of the King Carnation Quadrangle, King County Washington", and the "Depth to the Water Table in the Greater Seattle Area" map for the site vicinity.

The site inspection did not provide any site-specific data related to soil characteristics. Drainage characteristics were readily apparent with regional surface runoff flowing to the west. A general description of the groundwater system is provided, based on regional information from the USGS maps.

The Geologic Map of the Carnation Quadrangle indicates that the site is underlain by Cenzoic age Tokul alluvium. The lithology consists of brown, light-brown, inter-bedded gravelly sandy loam. Humic material is common in the upper 1-2 feet and inter-bedded gravel in the lower part. The thickness is commonly 5-10 feet (USGS, 1978). The depth to groundwater is greater than 10 feet in the unconsolidated alluvial deposits (USGS, 1983). Based on surface topography, as interpreted from the USGS topographic quadrangle map, local groundwater is assumed to flow in a south-easterly direction towards the adjacent creek. However, it has to be pointed out that the actual groundwater flow direction is often influenced locally by factors such as surface topography, underground structures, seasonal fluctuations, pumping wells, soil and bedrock geology, and other factors beyond the scope of this study.

#### 5.4 Historical Use

## **5.4.1 Historical Summary**

A review of historical topographic maps for the period 1921 thru 1993 shows no significant development or structures in the area of north Duvall, Washington. The 1993 topographic map shows the residential and commercial areas as currently developed. There are no signs of any land-filling activities or other structures on the Subject Property. Aerial photographs for the period 1941, 1952, 1968, 1971, 1981, 1986, 1998, 2005, 2006, 2009 and 2011 shows the Property during development. In the 2011 thru 1981 aerial photos, the Subject Property and the current building is constructed. The area to the north, south and east are also developed. One building is located to the north. There are no buildings to the west. Other commercial buildings are also apparent to the near south area of the town. No unusual activity or structures are observed. The 1971 aerial shows several small buildings on the property including an established driveway to the north end of the Property.. The concrete pad on the northwest corner of the Property is evident. This is the location of the removed UST's. The 1968 aerial shows one small building on the Property at the southeast corner of the property along with the concrete pad on the southwest corner. No structures are located on the north end of the Property. The 1952 aerial shows two small buildings on the southwest corner of the Property. In the 1941 aerial there is a small building on the northwest quadrant of the Property. The 1941 aerial shows a building along the mid point of the Property on Main Street. The rest of the Property is undeveloped. The area to the south is partially developed. There are no residences to the east.

The subject property is listed in the available city directories for 1993 to 2008. The current owner purchased the property on October 28, 2002. There are no listings in the Cole's Directories prior to 1993 which is included in this research. The directories show Domino's Pizza and Market Square in 2008, Safaris Pizza and Market



Square in 1993. No other listings were identified. The Sanborn Fire Insurance Maps for 1917 and 1930 were examined for the Property. The Property is shown in the 1917 map with three buildings located on the south half of the Property along Main Street. There are also two small structures on the southeast corner of the Property that looks like storage sheds. One of the buildings is marker Auto. Buildings are located in all directions. The 1930 map shows four small buildings on the half part of the Property with one marked Auto. In addition the map shows a gas and oil UST located on the southwest corner of the Property. The tank is located along Main Street and positioned so that part of the tank is under the ROW now used as Main Street. Buildings are evident in all directions. The current owner acquired the property in a Warranty Deed at reception # 20021031001764 and filed in the King County Recorder's office.

#### HISTORICAL USE SUMMARY

Period	Property Uses	Surrounding Area Uses
1917 to 1930	The Property has several small buildings with one indicating Auto which could be a repair	Area is partly developed in all directions.
	business. Actual use unknown	
1930 to 1941	Two buildings are located on the south half of the Property. One building continues to show auto. A UST is installed on the Property	Commercial Properties under development. The area is under major changes of roadways and businesses.
1941 to 1952	One building is constructed on the south half of the Property	Commercial Properties Retail Sales continue to be developed. Residential housing is also being constructed.
1952 to 1971	One building is shown in the southeast quadrant in the area of the current concrete pad remaining on the Property	Commercial Properties Retail Sales with area development continuing.
1971 to 1974	The Subject Property is developed with the single building as indicated in the earlier use. No construction is apparent in the aerials.	Commercial Properties Retail Sales are established.
1974 to 1981	The Property is occupied by the current building and is identified as a grocery store.	Commercial Properties and Retail Sales with the area mostly developed.
1981 to 1998	The current building is shown and is occupied by a pizza business and the grocery store.	Commercial Properties and Retail Sales are fully developed.



1998-2013	The Property is under new	Commercial Properties and Retail
	ownership. The Duvall Market	Sales are fully developed
	continues to operate. The building	
	is also occupied by Pho's Thailand	
	restaurant and a laundry and now	
	by Princess Nails	

#### **5.4.2 Title Records**

An 50-year chain-of-title was not performed for this study. A Chain of Title is not required by the ASTM Standard. Historical use of the ownership was researched using available information obtained by the King County Assessors sales records. The Property was owned by Clinton Hanson in 1989 and transferred to Property in Warranty Deed 198902280199 dated 2/28/1989 to Helmuth Schlueter. In 2002, the new owner, YCH Enterprise Corporation, acquired the Property from Helmuth Schlueter as evidenced in the Warranty Deed recorded at 20021031001764 dated 10/28/2002. The current owner, YCH Enterprise Corporation acquired the Property from Mr. Schlueter. The records prior to 1989 were not readily available and the King County Assessor's computer database does not contain records prior to 1989.

Information Source	Date	Book/Page	Listed Owner
Warranty Deed	2/28/1989	198902280199	Clinton Hanson
Warranty Deed	10/28/2002	20021031001764	Helmuth Schlueter
Current Owner			YCH Enterprise

#### **5.4.3 City Directories**

Historical City directories, published by Polk's and Cole's Directories, were reviewed by EDR Research for past names and businesses that were listed for the Property and adjoining properties. The directory information is limited to the years of later development of the Subject Property. Additional information is included in the Appendix C, Historical Research and Aerials.

## CITY DIRECTORY SUMMARY

Date	Site Comments	Surrounding Area Comments
1993	Cyprus Laser Corp.	15729 Main Duvall Texaco
	J L Scott RI Est	15925 Old Memories
	Market Square	
2003	Market Square	15729 Automotive Specialists
	Safaris Pizza	15904 Tuxedos Junction



2008	Domino's Pizza	15729 Valley Shell
	Market Square	15807 Duvall Tavern
	-	15904 Chldrns Serv & the
		Odditorium

### **5.4.4 Aerial Photos**

Available aerial photographs dated 1941, 1952, 1968, 1971, 1981, 1986, 1990-1998, 2005, 2006, 2009 and 2011 from the USGS and EDR were reviewed for this ESA. Other aerial photographs are available, however, the quality of the photographs is poor or details of the specific site cannot be clearly investigated. The 2012 aerial from Google maps was also reviewed for this study. Copies of selected EDR photographs are included in Appendix C of this report.

#### **AERIAL PHOTOGRAPH SUMMARY**

Date(s)	Property Comments	Surrounding Area Comments
1941	These photos show two buildings on the	The Property and all other land
1952	south half of the Property	surrounding the Property is developed to
		the south.
1968	These photos show one building located at	Buildings are located to the north, south
1971	the south end the Property.	and west. The residential to the east is not
		fully developed.
1981	The Dramouts and cons as exposedly	Divilding and located to the month, goveth
	The Property appears as currently	Buildings are located to the north, south
1986	developed. The Subject building is	and west. The residential to the east is not
1990, 1998	located on the Property.	fully developed.
2005	The December of the company of assembly	The grammary ding area is shown as denisted
2005	The Property appears as currently	The surrounding area is shown as depicted
2006	developed. The Subject building is	in the Site Photos and does not indicate
2009	located on the Property.	that there are any relevant REC's affecting
2011		the Subject Site. The area in all directions
2012		is fully developed.



## 5.4.5 Sanborn/Historical Maps

GEP requested historical Sanborn Fire Insurance maps for the Property from Environmental Data Resources (EDR), cover the years of 1917 and 1930. The quality of the copies is poor but the Property is shown clearly. In 1917 two buildings and two small sheds or buildings are located on the south end of the Property. One building is marked Auto. There is also another undetermined structure which appears to be a tank in the middle of the Property. There are no labels on the structure. The 1930 map shows Three buildings with the same building marked Auto and the two small sheds have been removed. The single building located to the south end has been removed since 1917 and a new building is located in the center of the Property. In addition to the buildings a UST marked Oil & Gas is included on the southwest corner of the Property. There are no other improvements on the Property.

#### FIRE INSURANCE MAP SUMMARY NO MAPS ARE AVAILABLE

Date(s)	Property Comments	Surrounding Area Comments
1917	Three buildings and two sheds are located	Buildings are located to the south and west
	on the Property.	
1930	There are three buildings on the Property.	Buildings are located south and west of
	Two of the buildings were in the 1917	the Subject Property.
	map and a new building in the center of	
	the Property is shown. In addition a UST	
	is shown at the SW corner marked Oil &	
	Gas	

#### **5.4.6 Other Environmental Reports**

There are two reports of records prepared for the subject Property and the adjacent properties.

#### PRIOR REPORT SUMMARY

Report Name	Date	Findings
Independent Cleanup Action	September 24, 2002	Two UST's and soil contaminated with
Report		petroleum hydrocarbons removed.
WT Services Company		Removal action was incomplete and a
		limited amount of contamination exists on
		the Property. Component of concern is
		the Benzene concentrations exceeding
		state cleanup limits.



Phase I Environmental Site	February 29, 2008	Report was limited to the north half of the
Assessment		Property, 15820 Main St. There were no
Envitech		findings identified for the Subject Property
		or the Adjacent Properties.

## **5.4.7 Building Department Records**

Records from City of Duvall Building Permits Department were reviewed for evidence indicating the developmental history of the Property, and for the presence of documentation relative to underground storage tanks. The records did include the original building permits or the Certificate of Occupancy for the Subject Building or prior structures. There are no permits for demolition of prior structures on the property. The historical records were limited. No environmental issues were discovered in the records review.

#### **5.4.8 Other Land Use Records**

No other land use records were reviewed or available for this property.

#### 5.5 Environmental Liens and Activity/Use Limitations

According the King County Assessors records, no environmentally-related liens or deed restrictions have been recorded against the Property. There is a Hazardous Substances Certificate and Indemnity Agreement on file twice. The documents were filed in 2002 and 2008 by the lender California Center Bank and Pacific International Bank respectively.

#### 6.0 Site Reconnaissance

#### 6.1 Methodology and Limiting Conditions

The Property was visually inspected by Ronald L. Battles on May 29, 2013 in accordance with the ASTM procedures. The weather at the time of the site visit was clear and in the 60's. The property owner, Mr. Yi, was not present with Mr. Battles during the Property inspection. Access to the building was opened by the tenants and without restriction on the day of the inspection.

#### **6.2 General Site Setting**

The subject property is generally located in a retail/commercial area of north Duvall, WA. The property is mostly graded level with a slope to the west and an elevated embankment on the east perimeter. The Property has been graded to alleviate stormwater encroachment.



UTILITIES (SERVICE PROVIDED BY) Xcel Energy		
Electric:	Puget Sound Energy	
Gas:	Puget Sound Energy	
Water:	Duvall Water District	
Sewerage:	Duvall Wastewater Dist.	

**Groundcover:** The property is covered with asphalt paving for vehicle access. A small strip of natural vegetation exists on the east perimeter of the Property.

**Other Site Improvements:** There are no other improvements on the property.

#### **6.3 Site Visit**

The subject building was open and operating on the day of the inspection, May 29, 2013. The premises was inspected without restriction. The building consists of single building which has two levels with both entrances above grade. The building is situated against an embankment on the east side which has been excavated to accommodate the split level building. The building is identified in the official records as a single level structure. The building is Concrete block construction with a partially pitched roof from the first lower level (west side) and extending upward to the top of the split level and the roof is then flat.

The building has three tenants on the west and first level of the building. The tenants are the Duvall Market, Princess Nails and Pho's Thailand Restaurant. There is a unit located on the east elevated side of the building which is vacant and may have been used as an office space in the past. The ceilings are either drywall or spray texture coated drywall. Flooring is either vinyl floor tiles or ceramic tiles. The insulation is not ACM in the restaurant and the nail salon. The Duvall Market has the spray texture and is suspect since the tenant has occupied the space since at least 1993. No REC's were observed on the first level relative to unit construction materials..

The second level of the building contains the vacant suite and no history of occupancy. The tenants are not aware of any use for the suite.

The Duvall Market was inspected and found to be in good condition. The tenant operates a retail grocery convenience store on the south end of the Subject Building. The unit contains display shelving, a walk in cooler, a cooler display unit without access a small utility room with limited storage, and a checkout counter. The business does not store or sell any hazardous substances. No REC's were identified in the tenant suite.

Princess Nails occupies the suite located in the middle of the building. The business provides customers with custom finger nail polishing and body waxing services. The reception area and customer seating in preparation chairs is observed along with a waiting area. At the back of the unit is a small office and break room with a counter. The floors are ceramic tile covered. No REC's were observed in the tenant space.

The third unit is located at the north end of the building. The business is Pho's Thailand Restaurant and was formerly known as Pho's Saigon Restaurant. The entry consists of customers tables with chairs including a small dining nook on



the far north end of the unit. The food preparation area and food storage area is at the east end of the suite. The flooring is vinyl tiles and the insulation is fiberglass. The food preparation area also has the commercial grill and floor sinks for serving customers. There were no REC's identified by the inspection.

#### **6.3.1 Hazardous Substances**

There were no hazardous substances identified on the Subject Property during the inspection.

#### **6.3.2 Petroleum Products**

There is no petroleum products associated with this business or property from current uses. The Property has a history of UST's located and removed from the premises.

#### OTHER PETROLEUM PRODUCTS None observed

#### 6.3.3 UST's

There are no UTS's on the Subject Property. A grease trap separator is located on the property associated with the restaurant

#### 6.3.4 AST's

There are no AST's located on the Property.

## **6.3.5 Other Suspect Containers** No containers were observed on the property.

#### **6.3.6 Equipment Likely to Contain PCBs**

The pad mounted transformer supplying service to the business is suspect as PCB Contaminated. The transformer was installed after the 1979 ban on the use of PCB's in electrical equipment. All transformers are the property of Puget Sound Energy and replacement or service is there responsibility.

## KNOWN OR SUSPECTED PCB-CONTAINING EQUIPMENT OR CONTAINERS

Material	Quantity	Use	Comments
Pad Transformer	1	Power Supply	Clean and without leaks
Fluorescent Lights	6	Area Lighting	Duvall Market



## 6.3.7 Interior Staining/Corrosion

No staining or corrosion was observed in the subject Property.

## 6.3.8 Discharge Features

No obvious indications of hazardous material or petroleum product releases, such as stained areas or stressed vegetation, was observed during the site reconnaissance or reported during interviews. De minimis vehicle stains on the asphalt paving from customers cars.

## 6.3.9 Pits, Ponds, And Lagoons

No evidence of on-site ponds or lagoons was observed or reported during the site reconnaissance. No evidence of catch basins was observed or reported during the site reconnaissance.

## 6.3.10 Solid Waste Dumping/Landfills

There is one solid waste container on the Property. There is no evidence of past or current land-filling activity on the Property.

## 6.3.11 Stained Soil/Stressed Vegetation

None observed on the property.

#### 6.3.12 Wells

There are no groundwater monitoring wells located on the Property.

Well Type	Well ID	Comments
N/A		

#### 7.0 Interviews

Interviews were conducted with the following individuals. Findings from these interviews are discussed in the appropriate sections in this report.



	Title	Name	Company	Method	Comments
Local Gov't	Fire Marshal	Receptionist	Duvall Fire	In Person	There are no
Official		Joel Kuhnhenn	District		fire department
		(Deputy Chief)			records for the
					Subject
					Property
					showing
					violations
Local Gov't	Customer	Receptionist	Duvall Building	In Person	The records
Official	Service		Permits Dept.		indicate the
	Representative,				current
	Building Dept.				Property is
					improved land.
Department of	VCP	Kari Peterson	Voluntary	Phone	Owner needs to
Ecology	Coordinator		Cleanup Dept.	Interview	complete
					remediation
	Project	Joe Hickey		Phone	and reapply to
	Manager			Interview	the agency for
					approvals to
	Archive	Cheri Gritsch	Dept.Ecology	In Person	close site and
	Records		Archives Section		obtain NFA
	Section				designation.

### 8.0 Other Environmental Considerations

### **8.1 Asbestos-Containing Materials**

The subject Property was visually inspected for the presence of Asbestos Containing Materials (ACM's) during this ESA. The ceiling texture and vinyl floor tiles are suspect materials in the Duvall Market and Pho's Restaurant. No suspect materials were sampled.

### 8.2 Lead-Based Paint

There is no evidence of Lead Based Paints (LBP) on the Property. All paints inspected in the subject building were water based latex paint. LBP may exist in the kitchen area of the restaurant.

### 8.3 Radon

The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, Zone 1 being



those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 picoCuries per Liter (pCi/L). It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Property in Zone 3, where average predicted radon levels are less than 1.0 pCi/L. An EDR Radon report is included in the Appendix of this report.

### 8.4 Wetlands

The nearest surface water in the vicinity of the Property is the Snoqualmie River located 0.25 miles to the west of the Property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed on the Property during this investigation.

Location	Approximate Size	Standing Water	Identified on Maps	Comments
West of the	N/A	Yes	Yes	No wetland areas
Property				exist on the subject
				Property

### 8.5 Microbial Contamination (Mold)

No mold was observed on the subject Property.

### 8.6 Client-Specific Items

No additional Client-specific items were requested or observed.

### 9.0 Findings and Conclusions

The subject Property was occupied and operating on the day of the inspection. The Property is operated as a tenant occupied rental space for commercial retail and restaurant businesses. The property is improved with the Subject Building, asphalt paving and utilities.

The Property is listed as a CSCSL site relative to an incomplete Voluntary Cleanup Program project. This designation also triggered an LUST classification that lists the site as under remediation. The owner is required to complete the soils and groundwater investigation, remediate any soils as detected above state action levels, reapply to the VCP and request an Opinion on the effectiveness of he cleanup action. The owner should also request a NFA action letter to close out the site. The Owner can also ask the agency for an Opinion or



consultation before implementing any site work. In our opinion the cost of investigation and remediation is expected to cost up to \$25,000.00 provided that significant additional problems are not encountered. A Toxic Risk assessment of the property contamination is also an option based on the environmental consultant's capabilities. An NFA letter will not be issued until the residual contamination is resolved with an agency acceptable action.

The Property is in good condition and has one Recognized Environmental Condition. The REC is not considered a HREC or a CREC by definition. Further Investigation is recommended.

### 10.0 Professional Opinion

Based on GEP investigation of the subject Property we have determined that there is one current Recognized Environmental Condition associated with the use of the property for petroleum fuel sales from at least 1930. The UST's have been removed but residual contamination continues to exist and the petroleum constituents of concern are persistent in the environment. The effect on groundwater has not been evaluated and requires additional investigation with a Site Assessment Survey. There are no Historical Recognized Environmental Conditions (resolved issues) associated with the other past uses of the Property. Based on our Phase I ESA investigation Global Environmental Partners does recommend further investigations related to the past business activities for the subject Property.

### **Industry Standard Definitions for Reference per ASTM E 1527-05**

**Adjoining Property** Refers to any real property of which the border is contiguous or partially contiguous with that of the property. This includes a property that would be contiguous or partially contiguous but for a road, street or other public thoroughfare separating them.

**Approximate Minimum** Identifies the area for which records must be obtained and reviewed as pursuant to **Search Distance (AMSD)** ASTM E 1527 Section 7 subject to the limitations provided in that section.

**Refers to the risk that may have a material environmental or Risk** environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

Consideration of business environmental risk issues may involve addressing one or more non-scope considerations, some of which are identified in ASTM E 1527 Section 12.

**Environmental Condition**Is an environmental condition that would have been considered a recognized environmental condition in the past but may or may not currently be considered a recognized environmental condition. The final decision rests with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the property at the time of the assessment.

**Environmental Lien** Is a charge, security, or encumbrance upon title to a property to secure the payment of cost, damage, debt, obligation, or duty arising out of responsible actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607



### (1) and similar state or local laws.

**Hazardous Was**te Is defined by RCRA as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may - (A) cause, or significantly contribute to an increase inmortality or any increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

**Practically Reviewable** Means that the information is provided by the source in the manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data.

**Property** Is identified as the real property that is the subject of the environmental assessment, including improvements, buildings and other fixtures located on the property and affixed to the land.

**Publicly Available** Is information to which access is allowed to anyone upon Information request.

**Reasonably Ascertainable** Refers to information that is publicly available, obtainable from its source within reasonable time and cost restraints, and practically reviewable.

**Recognized Environmental** Refers to the presence of any hazardous substances or petroleum products on a **Condition** property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the Property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. Conditions determined to be de minimis are not recognized environmental conditions.

### List of Acronyms Used in the Report

**AST** Aboveground Storage Tank

**ASTM** American Society for Testing Materials

CERCLIS Comprehensive Environmental Response, Compensation and Liability Information System

**ERNS** Emergency Response Notification System

**ESA** Environmental Site Assessment

**FEMA** Federal Emergency Management Agency

**HREC** Historical Recognized Environmental Condition

**LUST** Leaking Underground Storage Tank

**NPL** National Priorities List

**NRCS** Natural Resource Conservation Service

**PCB** Polychlorinated Biphenyls

RCRA Resource Conservation and Recovery Act REC Recognized Environmental Condition

SAR Site Assessment Report (Standard Environmental Records Review)

**TSD** Treatment Storage Disposal

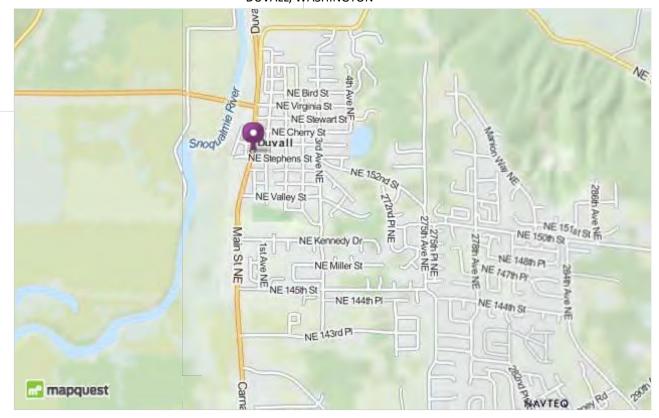
USDA United States Department of Agriculture USEPA United States Environmental Protection Agency



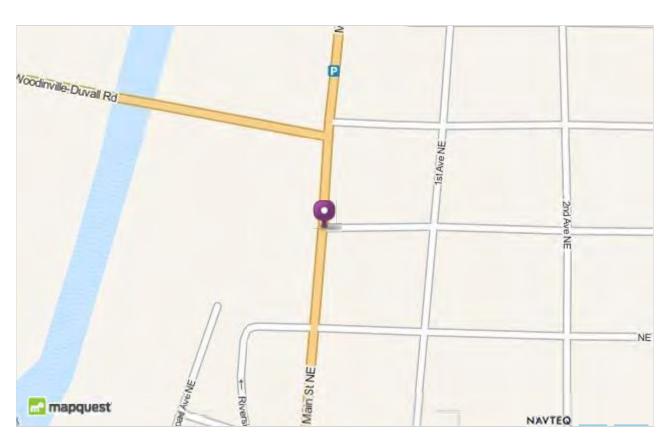
# Appendix A Figures and Maps



# LOCATION MAP OF SUBJECT PROPERTY DUVALL, WASHINGTON



### SUBJECT SITE LOCATION MAP



Residences	NORTH Reside	ences						
	1st AV	'ENUE						
	Resider	nces						
	Historia	c Car Wash						
Duvall Place	ALLEY F	ALLEY ROW						
Tuxcedos								
Antiques	Pho's Thailand Princess Duvall Market	Pho's Thailand Princess Duvall Market						
Mall	Nails	Old UST Location						
MAIN STREET								
Duvall Car Park	Vacant Property	Duvall Tavern	Valley Shell Station					
DUVA	FIGURE 1 LL MARKET SAUARE SITE LAYOUT	GLOBAL ENVIRONMENTAL PARTNERS 18555 SMOKY HILL ROAD, UNIT 461114 AURORA, COLORADO 80016						

# Appendix B Site Photographs



































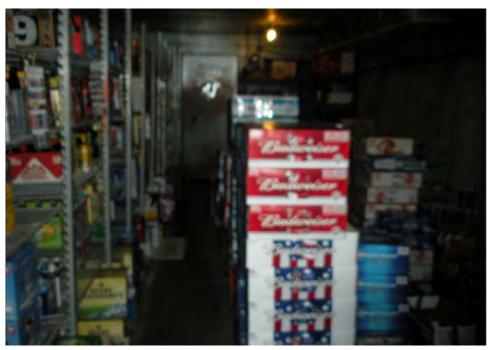




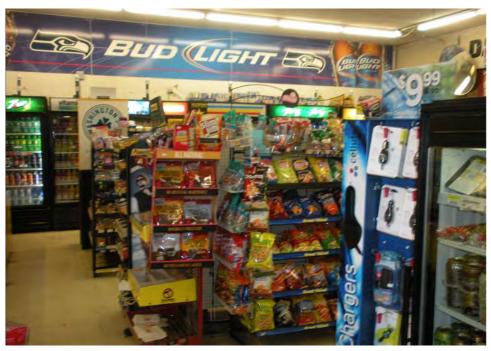
















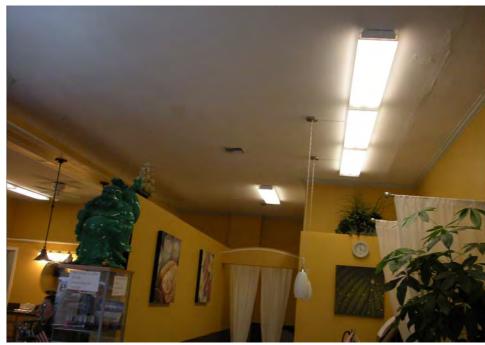






































# Appendix C Historical Research and Aerial Photographs



# **Retail Strip Center**

15820 Main Street NE Duvall, WA 98019

Inquiry Number: 3613632.3

May 22, 2013

# Certified Sanborn® Map Report



### **Certified Sanborn® Map Report**

5/22/13

Site Name: Client Name: Retail Strip Center RLB Family Trust

15820 Main Street NE 22206 E. Glasgow Place Duvall, WA 98019 Aurora, CO 80016

EDR Inquiry # 3613632.3 Contact: Ron Battles



The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by RLB Family Trust were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

### Certified Sanborn Results:

Site Name: Retail Strip Center
Address: 15820 Main Street NE
City, State, Zip: Duvall, WA 98019

**Cross Street:** 

P.O. # Verbal

Project: Retail Strip Center Certification # FB50-4662-A103

### Maps Provided:

1930 1917



Sanborn® Library search results Certification # FB50-4662-A103

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

University Publications of America

▼ EDR Private Collection

The Sanborn Library LLC Since  $1866^{TM}$ 

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### Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



### 1930 Source Sheets





Volume 1, Sheet 1

Volume 1, Sheet 2

### 1917 Source Sheets

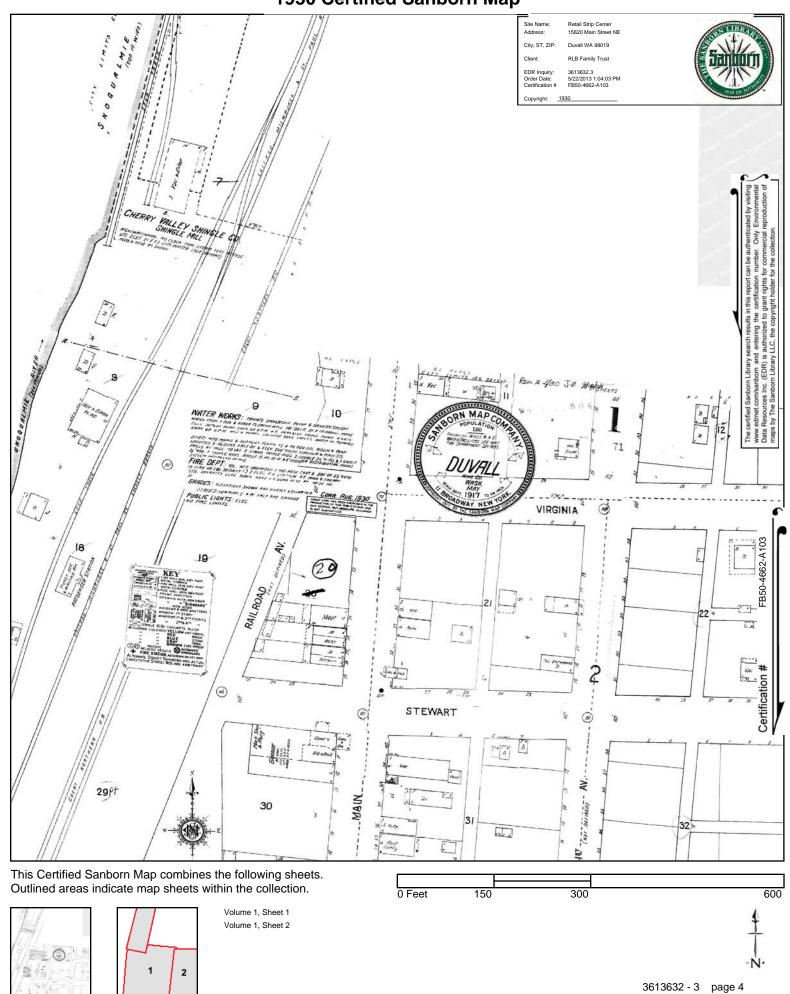




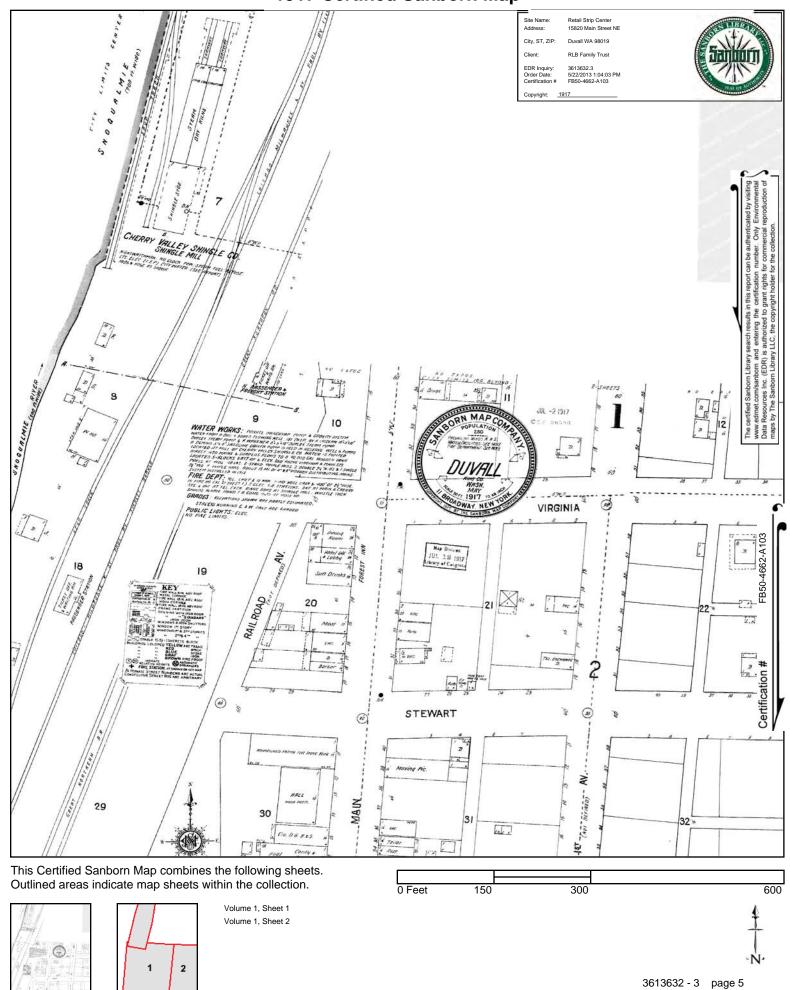
Volume 1, Sheet 1

Volume 1, Sheet 2

# 1930 Certified Sanborn Map



# 1917 Certified Sanborn Map



# **Retail Strip Center**

15820 Main Street NE Duvall, WA 98019

Inquiry Number: 3613632.4

May 22, 2013

# **EDR** Historical Topographic Map Report



### **EDR Historical Topographic Map Report**

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

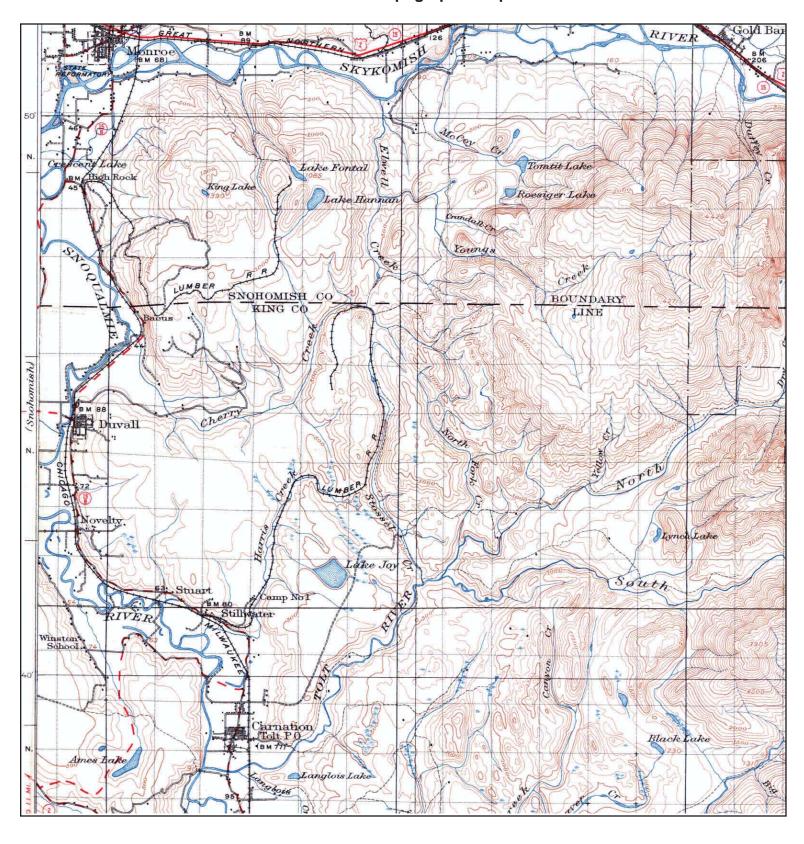
**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

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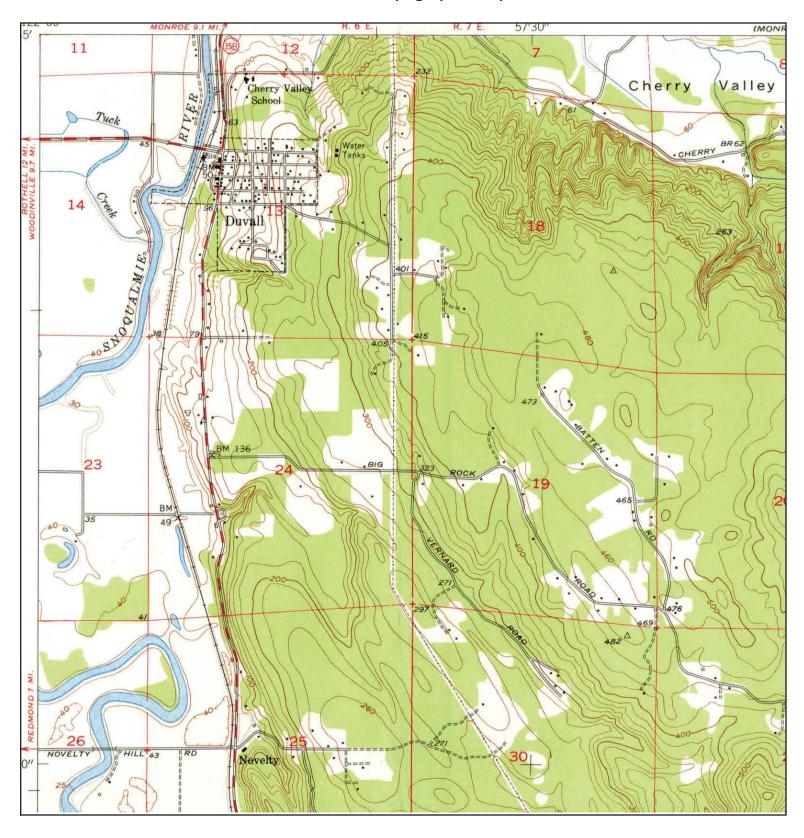


TARGET QUAD
NAME: SULTAN

MAP YEAR: 1921

SERIES: 30 SCALE: 1:125000 SITE NAME: Retail Strip Center
ADDRESS: 15820 Main Street NE

Duvall, WA 98019 LAT/LONG: 47.7434 / -121.9857 CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





TARGET QUAD

NAME: CARNATION

MAP YEAR: 1953

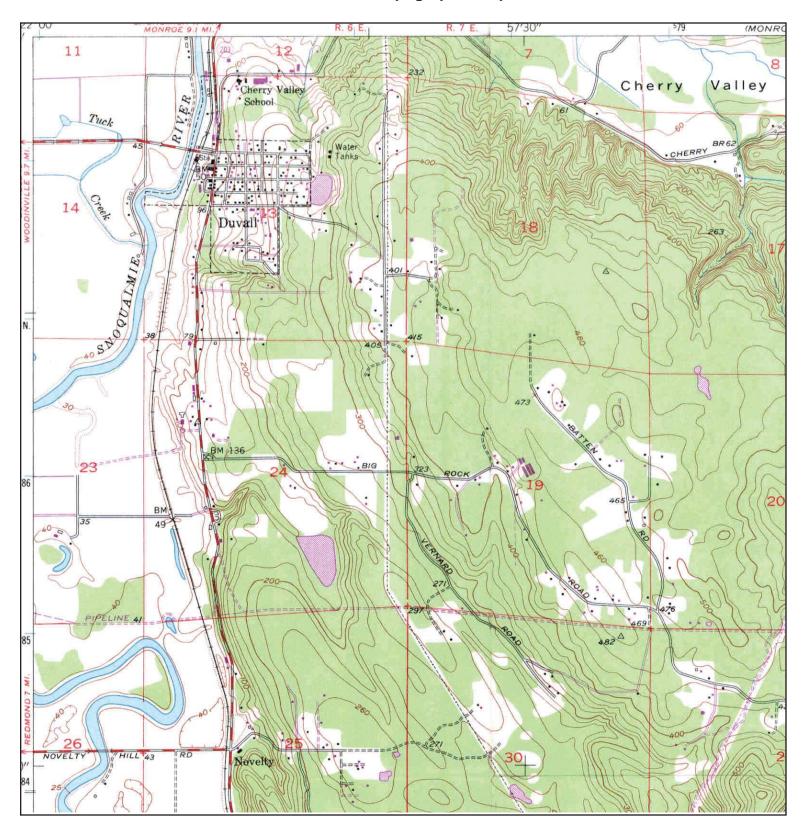
SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center ADDRESS: 15820 Main Street N

SS: 15820 Main Street NE Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust
CONTACT: Ron Battles
INQUIRY#: 3613632.4

RESEARCH DATE: 05/22/2013





**TARGET QUAD** 

NAME: CARNATION

MAP YEAR: 1968

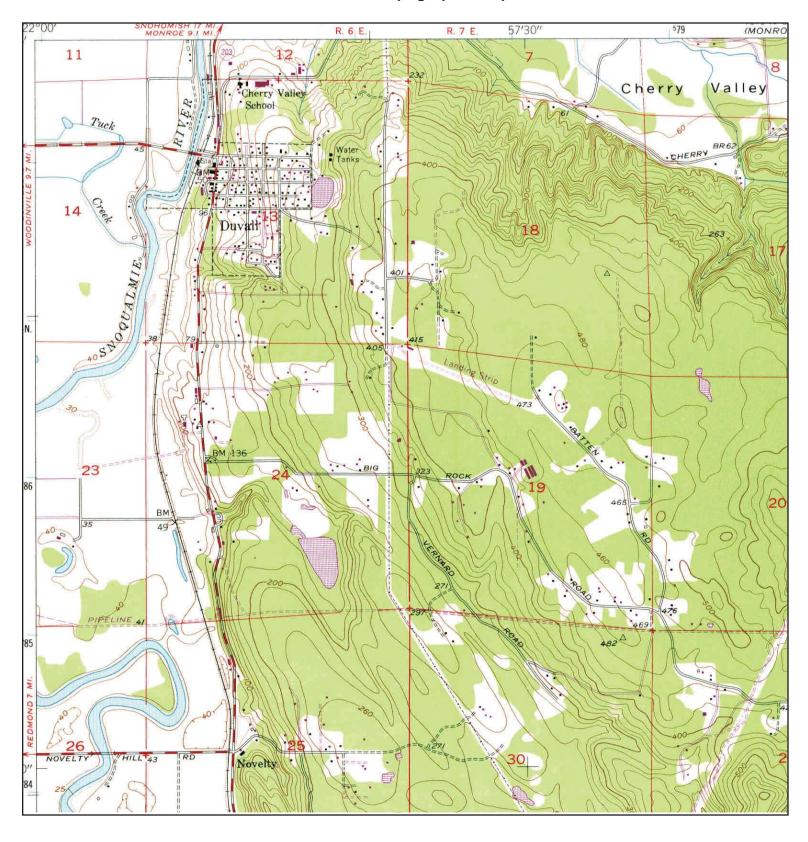
PHOTOREVISED FROM: 1953

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center
ADDRESS: 15820 Main Street NE

Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





**TARGET QUAD** 

NAME: CARNATION

MAP YEAR: 1973

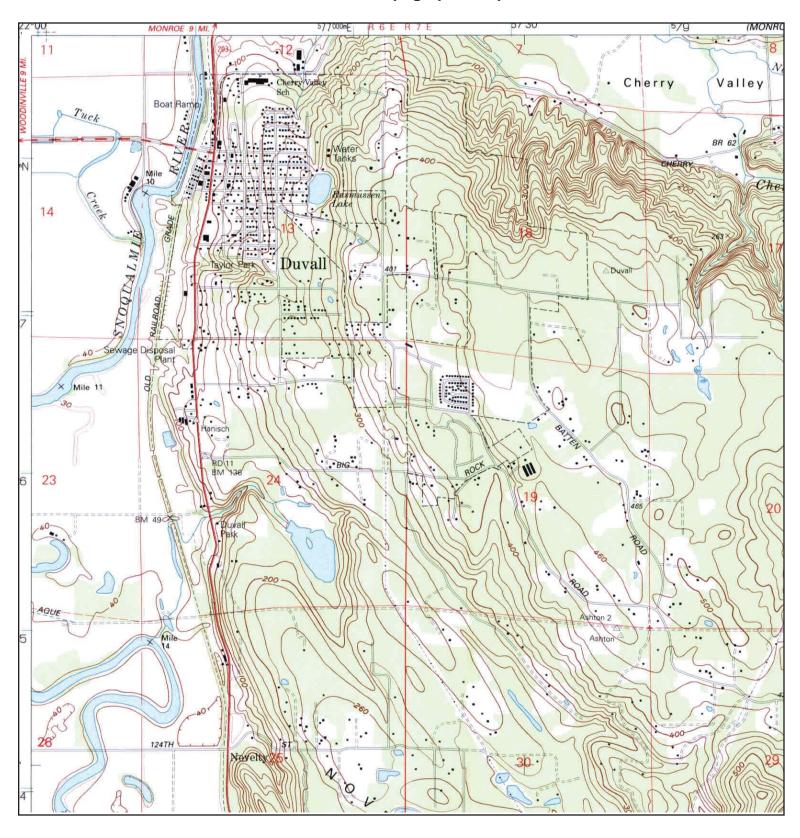
PHOTOREVISED FROM:1953

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center ADDRESS: 15820 Main Street NE

Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





TARGET QUAD

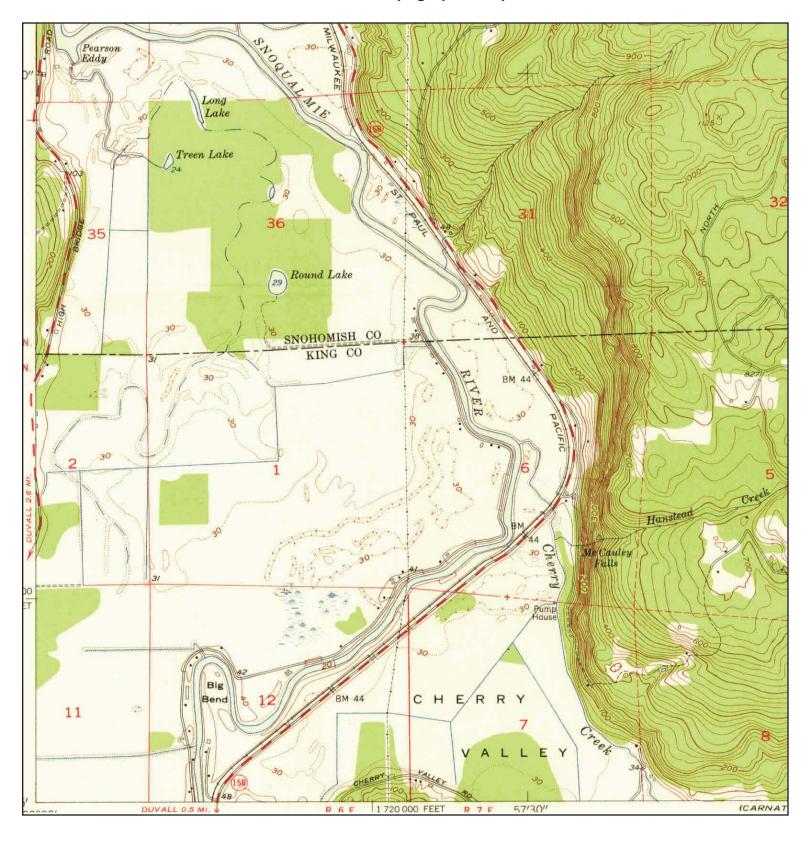
NAME: CARNATION

MAP YEAR: 1993

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center

ADDRESS: 15820 Main Street NE

Duvall, WA 98019 LAT/LONG: 47.7434 / -121.9857 CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





ADJOINING QUAD

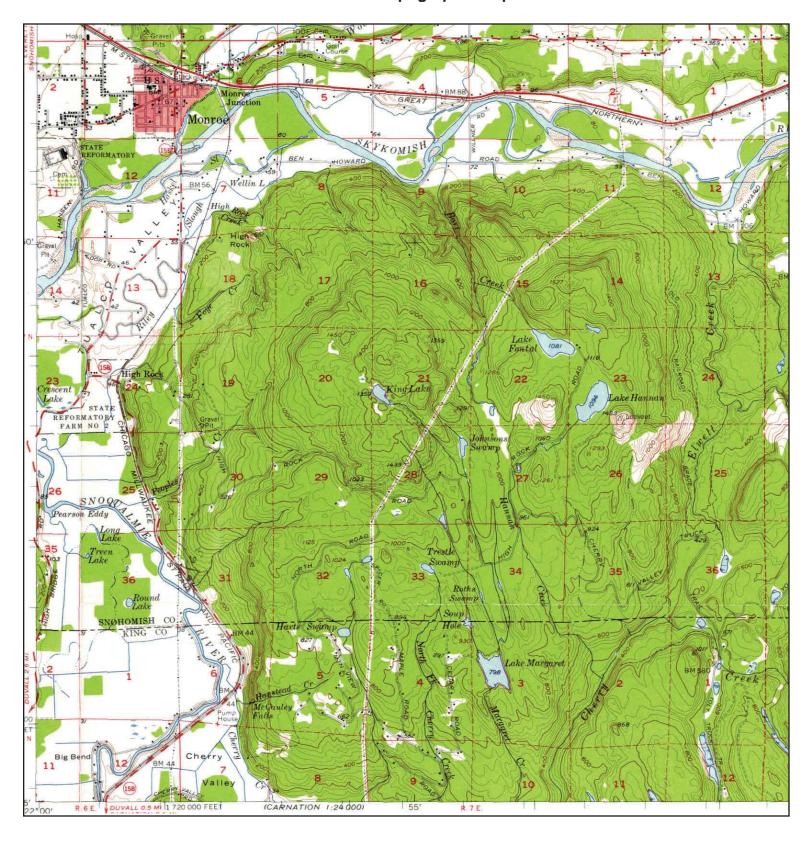
NAME: MONROE MAP YEAR: 1953

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center ADDRESS: 15820 Main Street NE

Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





ADJOINING QUAD

NAME: MONROE MAP YEAR: 1956

SERIES: 15

SCALE: 1:62500

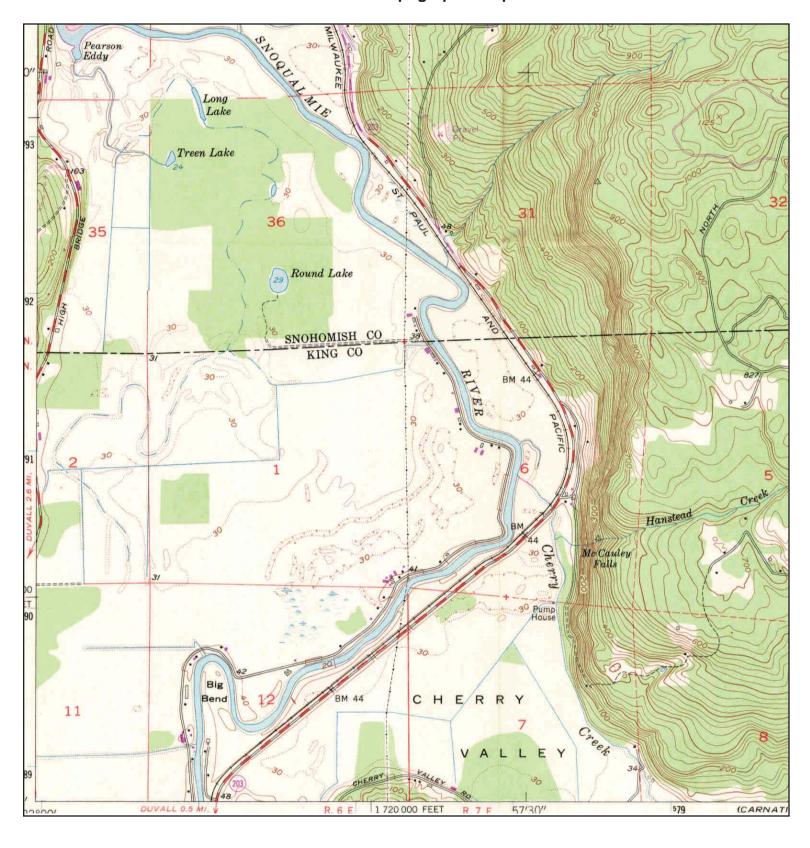
SITE NAME: Retail Strip Center
ADDRESS: 15820 Main Street NE

Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles

INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013





ADJOINING QUAD

NAME: MONROE MAP YEAR: 1968

PHOTOREVISED FROM: 1953

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center ADDRESS: 15820 Main Street NE

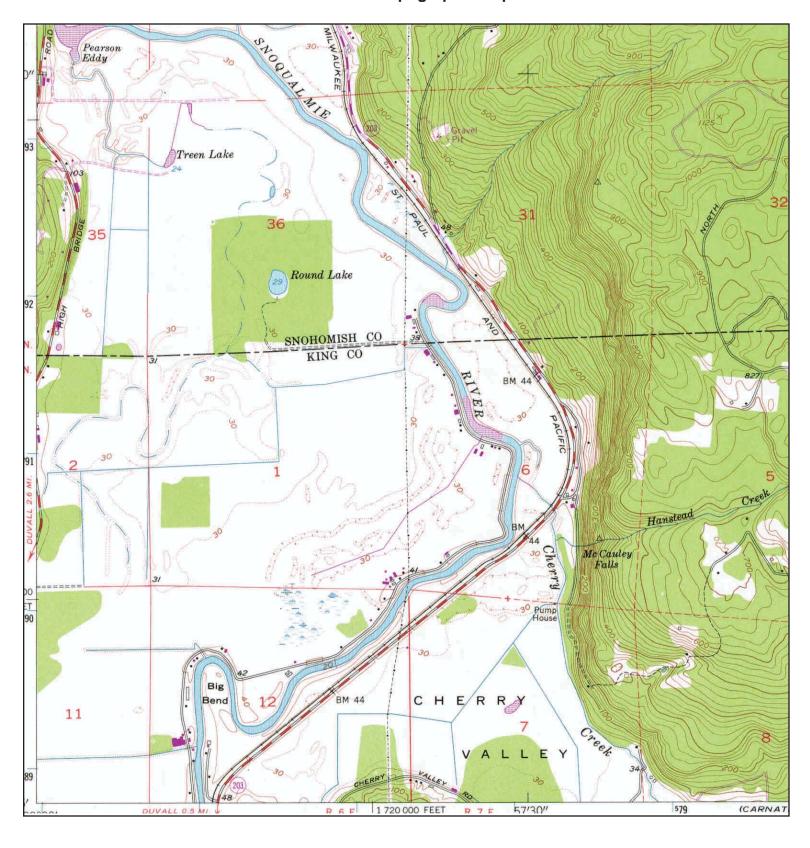
Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4

RESEARCH DATE: 05/22/2013

#### **Historical Topographic Map**





ADJOINING QUAD

NAME: MONROE MAP YEAR: 1973

PHOTOREVISED FROM: 1953

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center

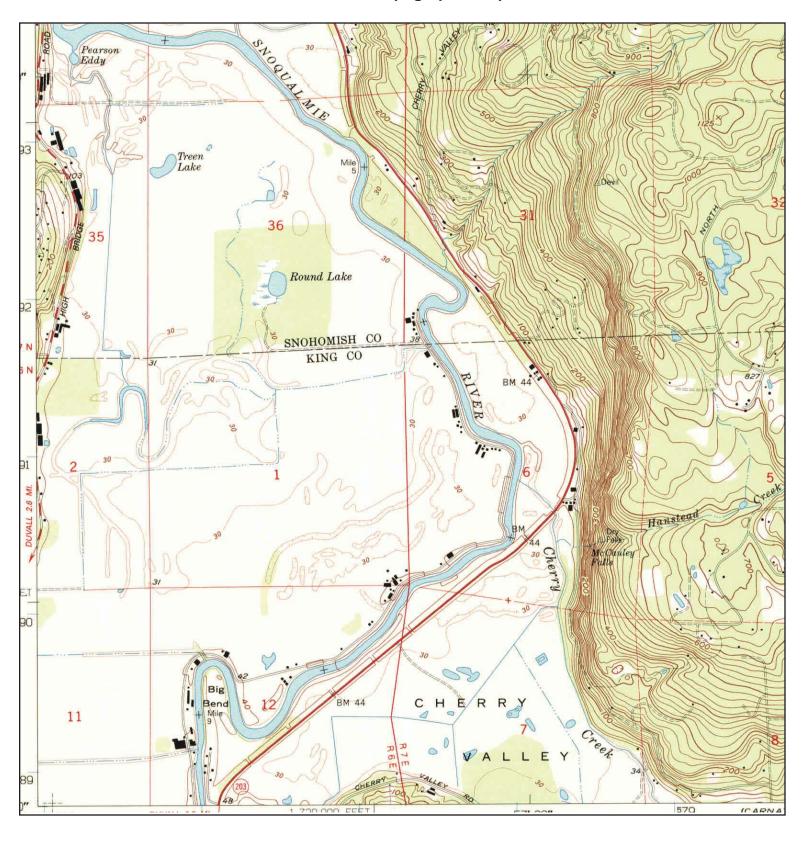
ADDRESS: 15820 Main Street NE Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust
CONTACT: Ron Battles
INQUIRY#: 3613632.4

RESEARCH DATE: 05/22/2013

#### **Historical Topographic Map**



N T ADJOINING QUAD

NAME: MONROE MAP YEAR: 1993

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Retail Strip Center ADDRESS: 15820 Main Street NE

Duvall, WA 98019

LAT/LONG: 47.7434 / -121.9857

CLIENT: RLB Family Trust CONTACT: Ron Battles INQUIRY#: 3613632.4 RESEARCH DATE: 05/22/2013

#### **Retail Strip Center**

15820 Main Street NE Duvall, WA 98019

Inquiry Number: 3613632.5

May 22, 2013

## The EDR Aerial Photo Decade Package



#### **EDR Aerial Photo Decade Package**

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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#### **Date EDR Searched Historical Sources:**

Aerial Photography May 22, 2013

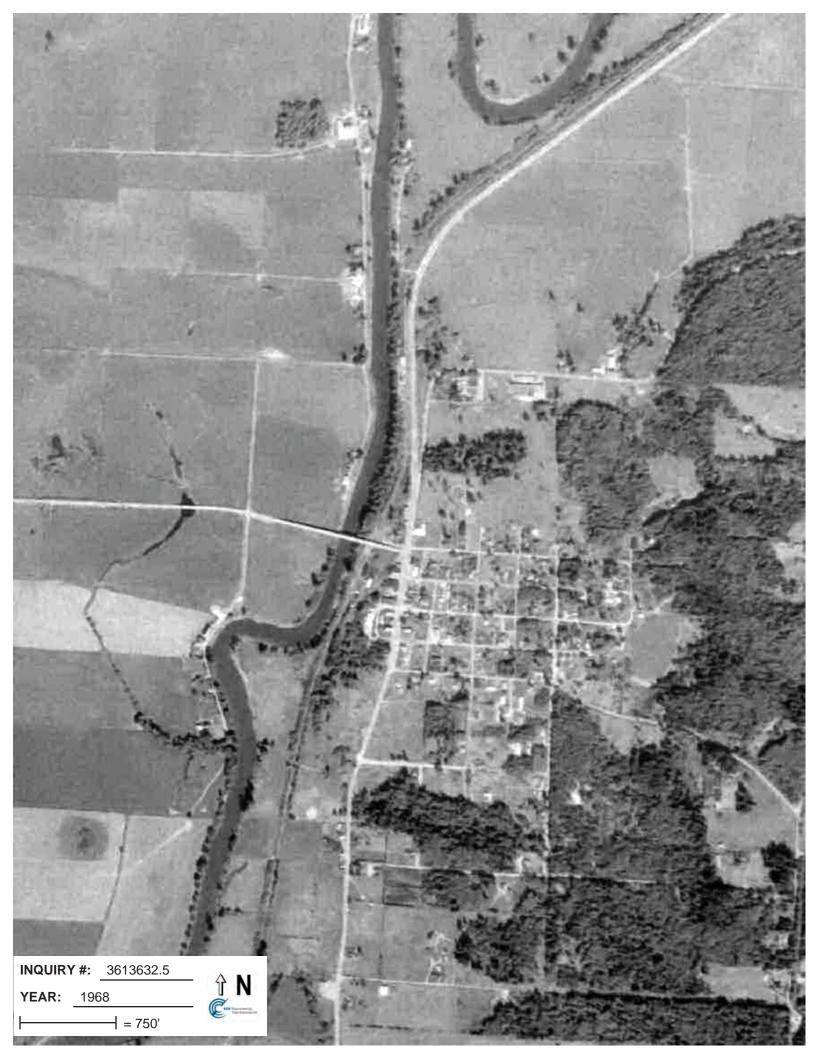
#### **Target Property:**

15820 Main Street NE Duvall, WA 98019

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1941	Aerial Photograph. Scale: 1"=750'	Panel #: 47121-F8, Carnation, WA;/Flight Date: June 11, 1941	EDR
1952	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Date: July 07, 1952	EDR
1968	Aerial Photograph. Scale: 1"=750'	Panel #: 47121-F8, Carnation, WA;/Flight Date: September 03, 1968	EDR
1971	Aerial Photograph. Scale: 1"=1000'	Panel #: 47121-F8, Carnation, WA;/Flight Date: September 18, 1971	EDR
1981	Aerial Photograph. Scale: 1"=1000'	Panel #: 47121-F8, Carnation, WA;/Flight Date: July 26, 1981	EDR
1986	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Date: May 29, 1986	EDR
1998,1990	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Composite DOQQ - acquisition dates: July 22, 1998, July 20, 1998, August 04, 1990	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Year: 2009	EDR
2011	Aerial Photograph. Scale: 1"=500'	Panel #: 47121-F8, Carnation, WA;/Flight Year: 2011	EDR











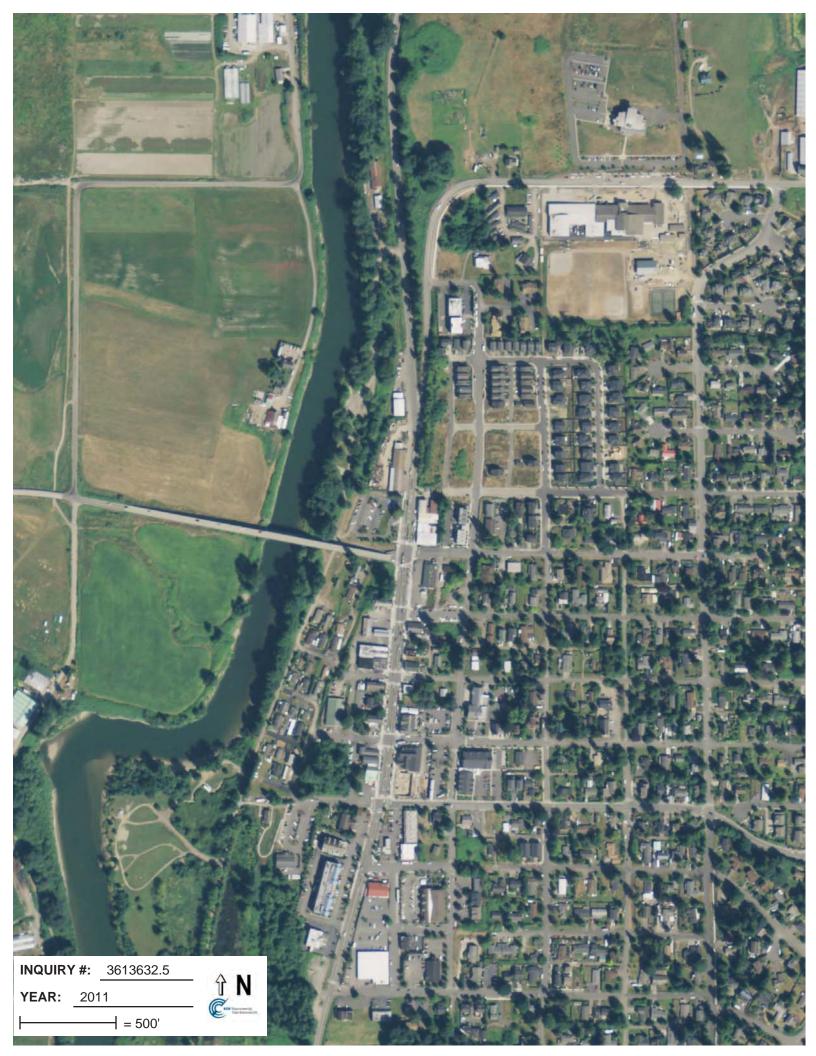












# Appendix E Agency Records





## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

#### **CERTIFIED MAIL**

March 31, 2006

Mr. Helmuth Schlueter 26321 NE Valley Street Duvall, WA 98019

Re: Notification of Pending Inactive Determination Status for the following Hazardous Waste Site enrolled in the Voluntary Cleanup Program:

• Site Name: Duvall Market

• Site Address: 15802 Main St., Duval, WA 98019

• Facility/Site No.: 7646431

VCP No.: NW0995

Dear Mr. Schlueter:

Our records indicate that you applied for the Voluntary Cleanup Program (VCP) on September 24, 2002. The Department of Ecology (Ecology) appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

The following details site activity since the date of application:

• Final Cleanup Report, September 24, 2002

The VCP is staffed to provide assistance to applicants who are actively pursuing site cleanup. Our records indicate that we have not received information regarding your progress on this site's clean up in the past twelve months. If you are still actively cleaning this site you have 30 days to provide a work summary, report, or other documentation that demonstrates you have taken cleanup actions during this past 12 months.

If no cleanup activities have occurred during the past year, or we do not hear from you by April 30, 2006, this site will be removed from the VCP due to inactivity. The status of this site will be updated in Ecology's database of contaminated sites.

Geographic Information

Ecology Region: NWRO

County: King

Legislative District: 45 Congressional District: 8

Tribal Land: No

WRIA: 7

# **Ecology Interactions**

200		6/16/2006
D Start Date	6/16/2006	9/24/2002
000 000 000 000 000 000 000 000 000 00		NW0995
Ecology Bregram Phone	(360) 407-7224	(360) 407-7224
	TOXICS	TOXICS
Interaction Description	State Cleanup Site	/ Voluntary Cleanup Sites

Industrial Codes (External Links Below)

No SIC information is available for this facility site. No NAICS information is available for this facility site.



<u>Ecology home</u> > <u>Toxics Cleanup</u> > <u>Sites</u> > Duvall Market

#### Duvall Market

#### ADDITIONAL RESOURCES

- Acronyms used by the Toxics Cleanup Program
- Cleanup Process: Major Steps & Definitions
- Data Submittal Requirements for All Cleanup Sites
- Toxics Cleanup publications



SITE INFORMATION

**Facility Site ID:** <u># 7646431</u>

Cleanup Site ID: 499

**Location:** Duvall, King County

Status: Cleanup Started ?

View Electronic Documents

VISIS Site Summary Report

#### **Document Repositories:**

Northwest Regional Office 3190 160th Ave SE Bellevue, 98008-5452 (425)649-7190

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# KING COUNTY

SITE

**Duvall Market** 

**Duvall Market** 

Alternate Name(s):

CleanupSite ID: 499

FS ID: 7646431

LOCATION

Address:

15802 MAIN ST DUVALL

98019

47.74369 Lat/Long: **47.**Township/Range/Section:

-121.81825 8E 17 **26N** 

8 45 Congressional District: Legislative District:

View Vicinity Map

STATUS

Ecology Status: Cleanup Started WARM BIN#:

Responsible Unit: Northwest Site Manager: Musa, Donna

Environmental Covenant? Is Brownfield? Is PSI Site?

View Site Web Page UST Site ID: WRIA ID:

NFA Received?

ASSOCIATED CLEANUP UNIT(s)

Cleanup Unit Name

CulD

NFA Date:

NFA Reason:

Statute: MTCA

Size (Acres)

**ERTS ID** 

2979 Duvall Market

**Process Type** Unit Type Upland

Independent Action

Cleanup Started

Unit Status

Project Manager

Performed By

Legal Mechanism

End Date

Start Date

Status

Northwest Region

Edens, Mark Hickey, Joe

SITE ACTIVITIES:

Activity Display Name Related ID (Unit-LUST-VCP) Applies to:

VcpProject VcpProject VcpProject

VCP Termination VCP Application NW0995 NW0995

9/24/2002 Completed Completed

6/16/2006 Completed

AFFECTED MEDIA & CONTAMINANTS:

VCP Opinion on Cleanup Action

NW0995

Contaminant:

Petroleum Products-Unspecified

Ð

= Confiemed Above state cleanup level

Bedrock

Sediment Air

Soil

Surface Water

Ground Water Media:

megrated Site information System



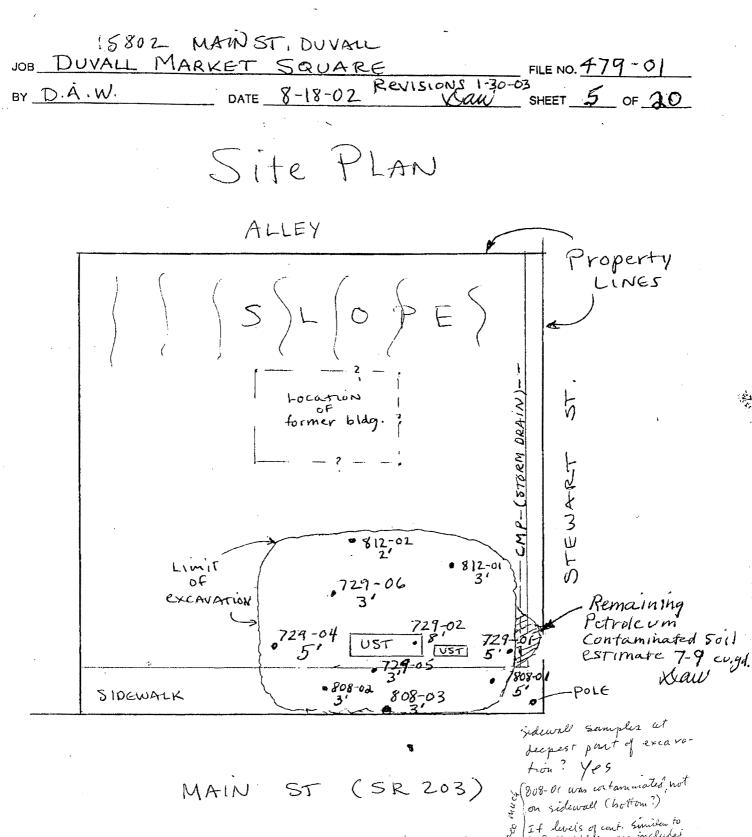
Joe Hickey Northwest Regional Office Toxics Cleanup Program -4256497202

# CONVERSATION RECORD

DATE 1 - 70 - 63 ち - 26 - 03 TIME

TYPE

□ VISIT □ (	CONFERENCE T	ELEPHO	ONE
$\sim 4 \propto 10^{-2}$			INCOMING
Location of Visit/Conference:		· -	OUTGOING
NAME OF PERSON(S) CONTACTED OR IN CONTACT	ORGANIZATION (Office, dept., burea		TELEPHONE NO:
Dan Wright		11/936	
SUBJECT Status of VCP review	· 4 P.	S CONTRACT	<u> </u>
- possible, NFA for soil on property.  - reeds to submit TEEE form	scuss sutration w/ dle	ut	· July springer
- posses at MFA for soil on property	wr weth B, or rest, cov.	proper our water too burn	· voe
- needs to submit TEEE form	responded it is not been	1 8 25H 33	
however not enough is known	to be sure itis protected	بر در ان ع ا	a anteched;
- remaining PCS is not likely to a	elfect que unless qui is nea	r the 5	depth but
- exact deptil of contamination.  - this was a reas enably succes	i relation to gu not ke	now	,
- this was a reasonably succes	stul soil vemediation	:	
3-26-03: called RP. The	ave con la costa	·	
consultant Maybe Sell p	Considering of the	- Mai	J'be or heur
owner to deal w, contam	ing him	;	- of p.er ry
6-19-03: John Sellwater En Helmut Schlueter	?) checking a status	- }	
			444
·			•
I CONTON TO THE PARTY OF THE PA			
ACTION REQUIRED			
,			
NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE // I	DATE (c	prid from
Joe Hickey	aufu ha Clecky	nete	5 6- 2-25-2010
ACTION TAKEN			
added to File (VCP	folden)	,	
SIGNATURE	TITLE	DATE	
_ lape le la la			7 - 25 - 2010
			The state of the s



11N = 20 ft.

NORTH

If levels of cont. Similar to 208-01 & higher are included how much soil is 10ft? Ou

· 812-02 = Soil sample No. 3 depth



# Voluntary Cleanup Program RECEIVED Washington State - Department of Ecology - Toxics Cleanup Program SEP 2 4 2002

RECEIVED

Request For Assistance/ Review I	orm	DEPT OF ECOLOGY
Have you discussed this site with an Ecolo If yes, what is that person's Name? ————————————————————————————————————		<u> </u>
Please submit the following with this signed fo		1
Site Summary (ECY 020-73)  A Check or Money Order for \$500 made ou		her existing reports on this site
	UETER Phone: 42 26321 NE VALLEY State: WA Zip: 88	5-788-1544 55-
	Calaborizatione:	
Site Address: 15802 MATH	ST.	
		Gounty: KING.
	LAGUA HELMUTH	a schueter
Site Owner Address: P.O・BOX 4	O Phone:	
	State: WA Zip: 4	18019
Application I have enclosed \$500. I under eight (8) hours of staff review and/or assist charges will depend on specific staff and of than \$500, I will be billed for and I agree to refunded to me.	stand that: this payment is the ance on the cleanup of my cor harge-out rates of that staff; if	equivalent of approximately ntaminated site; actual total charges are greater
S	ignature of Applicant	Date
	nte: The applicant is responsible for all billings	
For Office Use only: Date: Hours: R	ate: Staff Name:	
Date: Hours: R	ate: Staff Name:	
Date: Hours: R	ale: Staff Name:	
Date: Hours: R	ate: Staff Name:	
For Office Use only: Receipts Amount Date Pd Rec. #	For FISCAL USE ONLY 173-02-94-005000-5000	(LUST/Non-LUST) (Office) - 30 Non-LUST - 20 - 40 SWRO - 50 ERO - 60
ECY 020-74 (Rev. 09/98)	1 TCP I	
Ecology is an Equal O	pportunity and Affirmative Action employer.	(SIS, LUST, VCP)

F/57646431

### Where to Submit Your Forms, Reports, and Fees

206 242 9477

#### **County Serving**

Benton, Chelan, Dougals, Kittitas, Klickitat, Okanogan, Yakima

#### **Ecology Regional Office**

Central Region

15 West Yakima Avenue, Suite 200 Yakima, WA 98902-3401 (509) 575-2490 (voice) (509 454-7673 (TDD)

Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman

**Eastern Region** 

N. 4601 Monroe, Suite 100 Spokane, WA 99205-1295 (509) 456-2926 (voice) (509) 458-2055 (TDD)

Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom

Northwest Region

3190 160<sup>th</sup> Avenue SE Bellevue, WA 98008-5452 (425) 649-7000 (voice) (425) 649-4259 (TDD)

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

Southwest Region

PO Box 47775 Olympia, WA 98504-7775 (360) 407-6300 (voice) (360) 407-6306 (TDD)

**OR** if your site is part of a major pulp or paper mill, aluminum smelter, or oil refinery

**Industrial Section** 

PO Box 47706 Olympia, WA 98504-7706 (360) 407-6916 (voice) (360) 407-6006 (TDD)

ECY 020-74 (Rev. 09/98)

2

TCP I.D. #





# Voluntary Cleanup Program

Washington State - Department of Ecology - Toxics Cleanup Program

Site	Su	mr	nar	У

This Summary is a	required component of y	our request for assista	ince under	the Voluntary Cleanup Program
Which of the follow	ing apply?	Requesting ass	sistance on	n a planned cleanup n an ongoing cleanup. ompleted cleanup.
form) or this is a re-	tted your Request for Asvised Site Summary, Ple eeting/site visit/docume	ease provide this comp	oleted form	ly without a Site Summary (this to Ecology at least five (5) working first).
A) Site Identificati		•		
Name of Site:	DUVALI M	MARKET SQU	LARE	PARKINIG COT
Alternate Name(s)	for Site:			
Street Address of		MAIN ST		
City: DUVALL		State: WA	Zip: 9	18019
County: KIN	<u>G-</u>	UBI Number:		
Mailing Address (if	different from above):	P.O. BOX 40	)	
City: DUVI	Ni	State: WA	Zip:	9809
Township If Known:	Range	Section	Quarter-	Quarter
Latitude:	Degree	Minute	Second	
Longitude:	Degree	Minute	Second	
How large (in acre	alculate Latitude and L s) is the site?	.ongitude:		
Please attach two m	aps to this form.			
An area map, sh highways, and s	nowing general location treets. (Please mark sl	of the site in relation to be location.)	o surroundi	ing bodies of water, cities,
2) A site diagram s	howing surrounding cro	ss-streets, labeled buil	lding outlin	es, sampling and well locations,
etc.		SEE ATTAC	HEN	REPORT
B) Person/Organiza	ation Making Request			
	LUTY K SCH		·w.	
Firm:	101717 K COL	MEIER		\
Street Address: P.O.	BOX 40 2	6321 XIF WALL	=115	
City: 7/1/A		6321 NE VALL State: W4	Zip:	92010
Telephone Number: 4	125 788-1544	Extension:		13017.
Fax Number: 42	5 788-7322		10041	TER CBS Q VAHOO. COM
		SA)	<i>acound</i>	THE COS E YATTOU. CAM

Has site assessment	work been done at this site? yes no N In-progress	į
f yes, when?	work been done at this site? yes no lin-progress Were results reported to Ecology? yes no line Date	
Describe: /list reports		

less shan I acre

Remediation:	The state of the s
Has any site cleanup work been done at the site? If yes, please continue to answer the remaining query. When was the cleanup work done?  Were results reported to Ecology? yes no Expensive: (list reports in "E" below)	uestions in this section to the best of your ability.
Does contamination remain on-site after cleanup a lf yes, describe: (list reports in "E" below)	activities? yes 🔲 no 💢
As a result of the cleanup: How many acres of land were returned to use?	

#### E) Documentation:

Please list titles of all site reports below. Include name of consulting firm and year completed.	(If there is no
enough room for the entire list, please attach additional page(s) as necessary.)	

	Darage value de	acastronerranismosti (ilia	BESTERNAMENT (FEBRUARY)	dipplication of the second
Report of Independent Cleanup	WT	ZEVICES	Company	Sept 24,200
				-
Is additional information concerning the contaused available in a data base? yes no less a copy included for our use? yes no less a copy included for our use?	<b>∭</b> If yes,	reated or remov what programm	ed, or cleanup or re ing software is use?	mediation methods
F) Property Type: Commercial Industry Property currently being used? yes no Plans for change in use? yes no If			Other 🔲 (Please s	pecify)
G) Standard Industrial Classification (SIC)	Codes:			
List all that apply. If none apply, or if you don (i.e. automotive repair and maintenance, cons	t know yestruction e	our SIC code, lis equipment stora	st activities conducte ge, etc.).	ed at the site
H) Dangerous Waste Facilities:				
Does the facility have a dangerous waste idea If yes, what is the number? WAD	ntification	number? yes [	□ no 🔯	
I) Tank Information:				
Complete this table for ALL tanks, whether ur	ndergrour	nd (UST) or abov	reground (AST), inc	luding unregulated
tanks. (*Unleaded, leaded diesel, bunker-C, waste of (** Tank status: Left in Place, Removed, Clos			el, other (identify))	
	din ese ini é		enter samples et deut samples Enter samples et deut samples	922 - 12 State - 4821 922 - 13 State - 4821 922 - 13 State - 143
				and Cherry

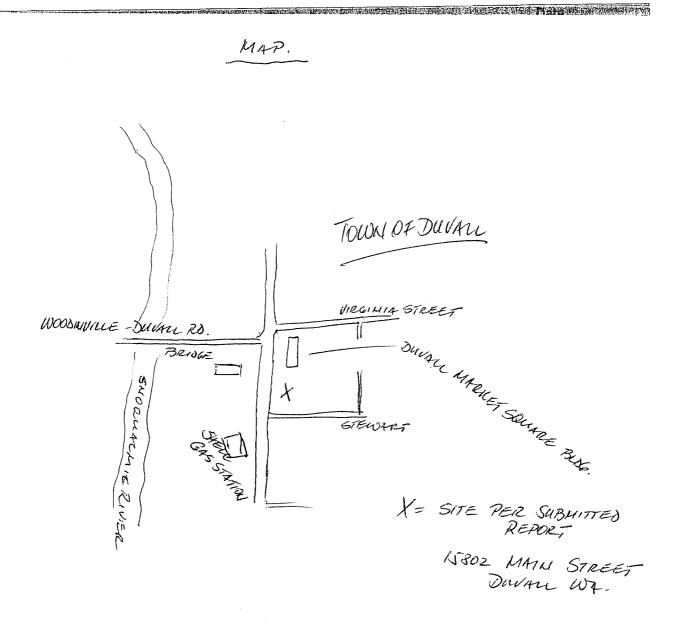
						Time States
1	UST	4000 675	Gasoline (Leaded)	N0 N0	N0 N0	REMOVED REMOVED

#### J) Owner/Operator History

(Please photocopy and attach copies if additional owners and/or operators are known.)

#### E) Documentation:

Please list titles of all site reports below. Include name of consulting firm and year completed. (If there is not enough room for the entire list, please attach additional page(s) as necessary.)



RETURN ADDRESS:
Pacific International Bank
1155 N 130TH ST.
SEATLLE, WA 98133



HAZARDOUS SUBSTANCES AGREEMENT

Reference # (if applicable): 114928

Grantor(s):

1. Y.C.H Enterprise Corporation

Grantee(s)

1. Pacific International Bank

Legal Description: LOT 9-16, BLOCK 9, VOLUME 19 OF PLATS, PAGE 47

Additional on page 2

Additional on page

Assessor's Tax Parcel ID#: 213070-0445-07, 213070-0460-07, 213070-0470-05

THIS HAZARDOUS SUBSTANCES AGREEMENT dated April 11, 2008, is made and executed among Y.C.H Enterprise Corporation, whose address is 15802 Main Street NE, Duvell, WA 98019 (sometimes referred to below as "Borrower" and sometimes as "Indemnitor"); and Pacific International Bank, Seattle Branch, 1155 North 130th Street Ste 100, Seattle, WA 98133 (referred to below as "Lender").

### **Appendix F**

### **Environmental Professional Qualifications**



#### RESUME FOR ENVIRONMENTAL PROFESSIONAL

Ronald L. Battles

20269 Smoky Hill Rd. Suite B-174 Aurora, Colorado 80015 (303) 692-0600 FAX 692-0440 E-Mail: ronaldbattles@comcast.net

#### PROFESSIONAL HISTORY

Global 2000 Environmental Partners, LLC, General Manager/Partner, 4 years Environmental Management International, Inc., Principal, 8 years ENSR Consulting and Engineering, Senior Regional Program Manager, 2 years Manville Sales Corporation, Manager of Environmental Affairs, 10 years B R Associates, Inc., Principal, Project Manager, 5 years Impact Environmental Consultants, Ltd., Project Manager, 1 year York Research Corporation, Project Manager, 3 years Marquette Cement Manufacturing, Engineer,1 year McCrone Associates, Research Microscopist (internship), 2 years

#### **EDUCATION**

B.S. ChE. Illinois Institute of Technology, Chicago, Illinois (1972)
M.S. ChE. Illinois Institute of Technology, Chicago, Illinois (1974)
M.B.A. University of Colorado, Denver, Colorado (1981)
J.D. University of Colorado, Boulder, Colorado (1986)
Harvard Executive Business Management Program, (1988) Postgraduate Courses: Environmental Law and Toxicology Advanced studies in Air Pollution Control, Financial Analysis, Colorado Geology, Management Principles, Microscopy, Occupational Health, Risk Assessment Analysis, Statistical Analysis, Corporate Environmental Practice, and International Env. Law

#### **EXPERIENCE**

1999 through Present **General Manager**, Global 2000 Environmental Partners, LLC Englewood, Colorado

The responsibilities in this position includes the organization of Global 2000 as a partnership and joint venture of environmental consultants worldwide to perform environmental consulting and engineering projects. The business focuses on the merger and acquisition market with an emphasis on national companies purchasing foreign businesses. Performs Phase I, II and III environmental studies. Also manages regulatory compliance audit projects including ISO 14000 certifications.



GEP Project 2075-027 May 31, 2013

The duties include the business alliances, marketing and administration responsibilities. Other responsibilities include project management and personnel training.

June, 1991 – December, 1998 **Principal,** Environmental Management International, Inc. Englewood, Colorado

Responsibility for the organization and management of Environmental Management International, Inc. The company is a full service environmental consulting company with annual sales exceeding \$2MM/year. Individual project experience includes industrial site inspections, corporate audit programs, real estate investigations, health and safety programs development. Performs Phase I, II and III investigations in accordance with ASTM standards. Also manages UST removal and remediation projects.

May, 1989 - June, 1991 Senior Regional Program Manager/VP, ENSR Consulting & Engineering, Corp. Westmont, Illinois

The company responsibilities include the marketing and managment of the western regional business for Phase I and II projects. The western region included the states west of Pittsburgh, PA and later was divided into three additional regions. The business was grown by 350% in one year and subsequently increased by 60% per year based on the established client base. The business focused on Phase I Environmental Site Assessments and Regulatory Compliance Audits.

June, 1988 - May, 1989 **Manager, Product Safety**, Manville Sales Corporation (Johns Manville Manufacturing Co) Denver, Colorado

Corporate responsibility for product liability programs, loss prevention control, product toxicity research, hazard communication program (OSHA), risk assessment analysis, and technical associations representative for the company. This includes HS&E Corporate regulatory responsibilities, directing environmental affairs, information services and environmental communication functions of the Health, Safety & Environment department.

Accomplishments include a revision of the MSDS automated computer reporting system to use fourth generation relational database software. Development of an International MSDS reporting system into the database in multiple languages. Manpower requirements were reduced by 70%.

Introduced the labeling of 600 products into seventeen new languages . Initiated four new toxicology and analytical evaluations related to asbestos and glass fiber toxicity.

Member of several company strategic groups including: 1) <u>F</u>iberglass <u>L</u>itigation <u>A</u>dvisory <u>G</u>roup - relating to future liability risk analysis 2) <u>S</u>cientific <u>A</u>dvisory <u>G</u>roup - evaluate the toxicity of Manville fiber based products and 3) <u>S</u>trategic <u>E</u>nvironmental <u>G</u>roup - evaluation of corporated based environmental compliance programs and SEC compliance.



January, 1981 - June, 1988

#### Manager, Environmental Affairs, Manville Sales Corporation

Denver, Colorado

Responsibilities include the management of scientists and engineers undertaking major environmental projects. The multimillion dollar assignments include air, water, hazardous waste, and Superfund cleanup activities. This job function also includes the responsibility for real estate assessments, permitting, compliance monitoring, disposal site assessments, remedial investigations, feasibility studies, engineering design, and cleanup activities. Other areas of responsibility include agency negotiations, RCRA assessments, NPDES discharge and pretreatment standards evaluations, risk assessment analysis, environmental litigation assistance, and contracting with environmental consultants. Average project size is \$2.2 MM with the largest in excess of \$34 MM.

Accomplishments include the development of a Corporate project team concept to approach project scope efficiently utilizing internal and external resources. The development of a computerized database management system for environmental information. The system was designed for environmental permitting, modeling, and report generation using networked Macintosh and IBM PC terminals to a DEC VAX 8300 mainframe computer.

January, 1977 - January, 1981 **Manager**, B R Associates, Inc., Denver, Colorado

Responsible for the business development, organization and management of Battles Research Associates. The company provided project management consulting and analytical services to its clients. The industries served included power generation plants, mining, manufacturing, and minerals exploration, natural gas exploration companies confronted with regulatory, analytical, and project management problems. Annual sales were in excess of \$750 M annually with a staff of twelve in 1981.

January, 1976 - January, 1977

Project Manager, Impact Environmental Consultants, Ltd., Denver, Colorado.

This partnership involved business development responsibilities during the startup of Impact, Ltd.,. The duties included the business plan preparation, legal rapport during the incorporation, and establishment of a successful marketing program. Functionally responsible for the technical expertise on air quality, process engineering, water quality engineering, and chemical analyses contracting.

Initiated a successful marketing program which allowed the company to double its sales volume for the first three years. This was accomplished through the initial customers contacted and repeat business as project size increased.

July, 1974 - January, 1976

Western Regional Manager, York Research Corporation, Denver, Colorado

Business development manager for a new regional office. Established a successful marketing program.with gross sales exceeding \$1.2 MM annually. Responsibilities included the administration of personnel, finances, purchasing, and marketing. Directed personnel responsible for all engineering projects to the power generation industry. Clients included Pacific Power & Light, Public Service of New Mexico, Utah Power & Light, Kansas Power & Light, Arizona Public Service Co. and Public Service Co. of Colorado.

Accomplishments included the startup of the new regional office, networking of contacts to develop a stable base of contract work, and the expansion of the office from two engineers to sixteen within three years.

June, 1972 - July, 1974



#### Combustion Engineer, Marquette Cement Manufacturing Co., Chicago, Illinois

Responsible for air pollution emissions testing and facilities permit submittals. Water pollution samples collection and regulatory compliance. Engineering review of pulverized coal and fuel oil firing systems for manufacturing locations. Reported to the Director of Engineering for all responsibilities.

May, 1970 - June, 1972

Research Microscopist, Mc Crone Associates, Chicago, Illinois

Laboratory technician specializing in wet chemical sample analyses and micoscopical sample analysis. Performed analyses on a project basis for individual clients.

#### PROFESSIONAL REGISTRATIONS AND AFFILIATIONS

Air and Waste Management Association
American Institute of Chemical Engineers
American Bar Association (Environmental and Real Estate Section Member)
ISO 14000 Auditor
Certified Asbestos Inspector and Management Planner
California Registered Environmental Assessor II (REA II)
OSHA 40 hr. Certified
Certified Hazardous Materials Manager (CHMM)
Registered Professional Engineer (Chemical)

#### TECHNICAL SPECIALTIES

36 years experience in:

- Environmental risk assessment analysis
- Environmental compliance audits/remedial action plans
- OSHA hazard communication/product liability assessment
- Corporate regulatory affairs/permit negotiations
- · Hazardous waste site investigations
- Point source assessments (air and water)
- Environmental litigation support
- Corporate EH&S management
- Project management consulting
- ASTM Phase I, II, III, PCAs and Transactional Screen Assessments



# Appendix G Additional Documentation and Reports



#### **Environmental Consulting**

PO Box 239

Seahurst, WA 98062 WTSERCI110CL Fax and Phone 206 242 9477 206 295 6921

September 24, 2002

#### **Independent Cleanup Action Report**

Duvall Market Square

RECEIVED SEP 2 4 2002

Prepared for: John Schlueter and William Minaglia

DEPT OF ECOLOGY

PO Box 327 Duvall, WA 98019

Prepared by: Daniel A. Wright Certified Washington State Site Assessor

#### Table of Contents

Page No.	Content
1-3	Report text
4	Vicinity Plan
5	Site Plan
6-14	Lab. Results, QA Data and Chain-of-Custody for samples obtained 7/29/02
15-18	Lab. Results, QA Data and Chain-of-Custody for samples obtained 8/08 & 8/12/02
19 20	Certificate of Disposal, Rinker Materials Site Assessment Certification, Daniel A. Wright

PO Box 239 Seahurst, WA 98062 WTSERCI110CL Fax and Phone 206 242 9477

September 24, 2002

John Schlueter and William Minaglia PO Box 327 Duvall, WA 98019

Subject: Report of Independent Cleanup Action, 15802 Main Street, Duvall, WA.

Attention: John Schlueter, William Minaglia

This report presents a summary of an independent cleanup action performed in the location of 2 former underground storage tanks located at 15802 Main Street, Duvall, Washington.

#### The Site

Located in the older business commercial area of downtown Duvall, the site consists of a mostly flat parcel, approximately 9600 square feet in size. Prior to the excavation activities described below, the majority of the parcel was covered with concrete pavement, including the floor slab of a former building located in the easterly portion of the parcel. At the east end of the parcel, the land slopes up to a public right of way which is currently a gravel alley. Surrounding parcels are largely retail commercial in nature, as the site is located on State Route 203 (Main Street), a heavily trafficked thoroughfare. This area has been commercially developed for an extended period, dating back to the late 1800's and early 1900's. The location of the site is shown on the Vicinity Plan on page 4.

#### UST Systems

On July 29, 2002, two underground petroleum storage tanks (UST'S) were decommissioned by removal by Tank Services Northwest, of Woodinville, Washington. The two former gasoline tanks were excavated and removed from the site, one approximately 675 gallons in volume and one approximately 4000 gallons in volume. Anecdotal information indicates that the tanks had last been operated in 1976 or thereabouts, and were not registered with Ecology.

Each tank contained a small amount of water with a trace of gasoline product. The tanks appeared to be in an intact condition, with no apparent holes or significant rust. The location of the tanks is shown on the site plan, page 5.

Page 2 15802 Main Street September 24, 2002

#### Soils and Groundwater

The soils encountered during excavation included fills placed around the tanks (brown to gray silty sand with gravel, moist, loose) to undisturbed native soils adjacent and under the tanks (light brown to dark gray sandy silt, dense, damp). No groundwater was encountered in the excavation.

#### Soil Sampling and Analysis

During excavation of the tanks on July 29, 2002, a layer of soil ranging from 2 to 5 feet in depth exhibited a gasoline-like odor. This material was stockpiled separately under a cover of plastic sheeting. Additional samples were obtained from the four side walls and the base or floor of the excavation below the tanks. In addition a sample was obtained of the general excavation stockpile, to determine its suitability for backfill. The soil samples were obtained as discrete grab samples, placed in clean glass jars, stored in a chilled container and transported to Friedman and Bruya, Inc., Environmental Chemists, 3012 16th Avenue West, in Seattle, Washington. The samples were tested for Benzene, Toluene, Ethylbenzene, Xylenes and Gasoline by Method 8021B/NWTPH-Gx. The samples were also tested for Lead content by Method 6010. One sample was also tested for diesel and heavy oils by method NWTPH-Dx. The sample locations and depths are shown on the site plan, page 5.

The results of the laboratory analyses of samples obtained July 29 showed that significant gasoline contamination existed on the west side of the excavation (under the sidewalk adjacent to the street, sample 729-05), also on the south side of the excavation (at the sidewalk along Stewart Street, sample 729-01) and on the east side of the excavation (sample 729-06).

Laboratory results indicated that no detectable contamination existed at the base of the excavation below the tanks (sample 729-02), and from the north end of the excavation (sample 729-04). Soils selectively stockpiled for use as backfill showed to be uncontaminated and suitable for re-use on the site (sample 720-03).

The result of the analysis for diesel and heavy oils performed on soil sample 729-01 showed 170 parts per million. This result is below Method A cleanup levels, and is the result of spillover of gasoline-range hydrocarbons into the diesel range, due to high concentration of gasoline contamination in that sample.

The laboratory results, chain-of-custody form and quality assurance data are presented on pages 6 through 14. Page numbers for this report are shown in the upper right corner of each page.

Page 3 15802 Main Street September 23, 2002

#### Cleanup Action

On August 8 and 9, 2002, excavation and transportation of gasoline-contaminated soils was undertaken. Approximately 236 tons of contaminated soil was transported to Rinker Materials, located at 6300 Glenwood Avenue in Everett, Washington. At this location the soils were remediated by thermal desorption (incineration). Certification of the soil remediation is presented on page 19.

Soils were excavated and transported for treatment from the west side of the excavation under the sidewalk and from the area east of the initial excavation. Additional excavation from the south end of the excavation was not undertaken due to the presence of a corrugated metal storm drain pipe and the risk of undermining the Stewart Street right-of -way.

Additional soil sampling was performed during and subsequent to the excavation operation in order to verify the effectiveness of the cleanup, and to identify any remaining areas of contaminated soil. The limits of the excavation and the locations and depths of the sampling are shown on the site plan, page 5.

The results of the laboratory analyses confirmed that soils with contamination levels above the Model Toxics Control Act (MTCA) Method A cleanup levels had been removed from the area east of the tank locations (samples 812-01 and 812-02), and also from the area west of the tank locations under the sidewalk area (samples 808-01 and 808-02). A sample obtained from the sidewall of the excavation of material remaining under the Main Street right-of- way showed that some significant contamination remained. This material was not removed since it is beyond the property lines of the site, and due to the risk of undermining the Main Street right-of way.

The laboratory results, quality assurance data, and chain-of-custody form for the samples obtained on August 8 and August 12 are presented on pages 15 - 18.

#### Summary

Based on observations made during excavation activities and the results of the laboratory analyses, it is our conclusion that soil contamination related to the gasoline underground storage tank systems on the site has been remediated to Method A standards within the approximate property limits of the site.

We appreciate the opportunity to assist you in this matter. If you have any questions regarding this report or need additional services, please call.

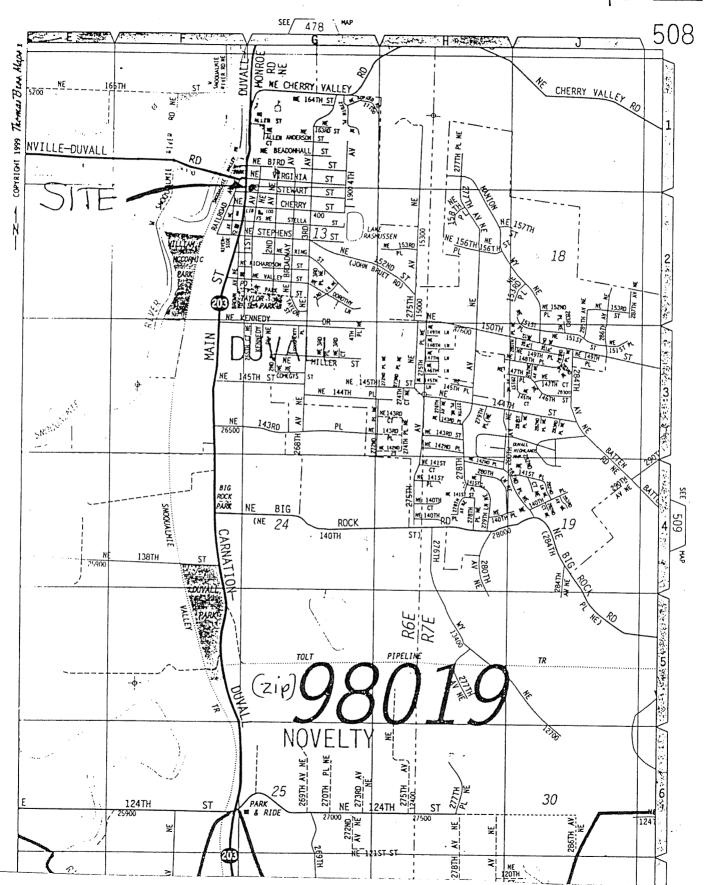
Respectfully submitted,

Daniel A. Wright

Certified Site Assessor

#### VICINITY MAP

JOB 15802 MAIN ST. DUVALL, WA FILE NO. 479-01 BY D. WRIGHT \_\_ DATE 924/02 \_ of 20



WT SERVICES COMPANY P.O. BOX 906 • Seahurst, WA 98062 • (206) 242-9477

15802 MAINST, DUVALL JOB DUVALL MARKET SQUARE

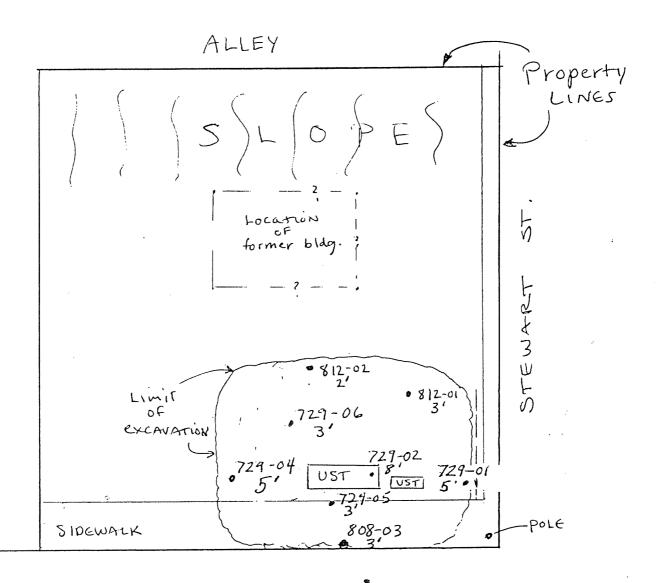
FILE NO. 479-01

BY D.A.W.

DATE 8-18-02

SHEET <u>5</u> OF <u>3.0</u>

### Site PLAN



MAIN ST (SR 203)

1 in = 20 ft.

Soil Sample No, \$ depth

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 9, 2002

Dan Wright, Project Manager WT Services Company PO Box 239 Seahurst, WA 98062

Dear Mr. Wright:

Included are the results from the testing of material submitted on July 29, 2002 from your Minaglia-Duvall project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures NAA0809R.DOC

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/31/02 Date Analyzed: 08/01/02

#### RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 76-118)
729-01 d 207240-01	2.4	12	9.0	31	1,700	ip
729-02 207240-02	< 0.02	<0.02	< 0.02	< 0.02	<1	97
729-03 207240-03	< 0.02	<0.02	< 0.02	< 0.02	<1	97
729-04 207240-04	< 0.02	<0.02	<0.02	< 0.02	<1	88
729-05 207240-05	0.30	2.1	1.2	8.8 ve	540 ve	ip
729-06 207240-06	<0.02	0.08	0.10	1.7	140	99
Method Blank	<0.02	< 0.02	< 0.02	<0.02	<1	100
Method Blank	< 0.02	< 0.02	< 0.02	< 0.02	<1	98

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

d - The sample was diluted. Detection limits are raised due to dilution.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/31/02 Date Analyzed: 07/31/02

### RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

#### Extended to Include Motor Oil Range Compounds

Results Reported on a Dry Weight Basis Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Diesel Extended</u> (C <sub>10</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 45-147)
729-01 207240-01	170	83
Method Blank	<50	84

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall Date Extracted: 07/30/02 Date Analyzed: 07/31/02

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as µg/g (ppm)

Sample ID Laboratory ID	<u>Total Lead</u>
729-01 207240-01	6.1
729-02 207240-02	2.4
729-03 207240-03	2.6
729-04 207240-04	2.9
729-05 207240-05	5.1
729-06 207240-06	5.9
Method Blank	<2.0

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207150-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207150-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Black Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	98	98	34-136	0
Toluene	μg/g (ppm)	0.5	< 0.02	100	100	35-140	0
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	101	102	37-150	1
Xylenes	μg/g (ppm)	1.5	< 0.02	105	106	36-143	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	92	94	60-122	2
Toluene	μg/g (ppm)	0.5	94	96	60-126	2
Ethylbenzene	μg/g (ppm)	0.5	95	97	56-130	2
Xylenes	μg/g (ppm)	1.5	99	101	58-128	2
Gasoline	μg/g (ppm)	20	99	100	43-143	1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207140-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207140-02 (Matrix Spike)

			Blank	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	60	62	34-136	3
Toluene	μg/g (ppm)	0.5	< 0.02	82	86	35-140	5
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	92	95	37-150	3
Xylenes	μg/g (ppm)	1.5	< 0.02	96	99	36-143	3

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	μg/g (ppm)	0.5	70	68	60-122	2
Toluene	μg/g (ppm)	0.5	96	92	60-126	4
Ethylbenzene	μg/g (ppm)	0.5	104	102	56-130	2
Xylenes	μg/g (ppm)	1.5	110	106	58-128	4
Gasoline	μg/g (ppm)	20	100	99	43-143	1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 207207-03 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent Difference
Analyte	Units	Result	Result	(Limit 20)
Diesel Extended	μg/g (ppm)	<50	< 50	nm

Laboratory Code: 207207-03 (Matrix Spike)

			Blank	Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	μg/g (ppm)	500	<50	116	122	60-187	3

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	μg/g (ppm)	500	105	67-140

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/09/02 Date Received: 07/29/02 Project: Minaglia-Duvall

### QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 207240-06 (Duplicate)

				Relative	
Analyte	Reporting Units	Sample Result	Duplicate Result	Percent Difference	Acceptance Criteria
Analyte	Units	nesun	nesun	Difference	Criteria
Lead	μg/g (ppm)	5.9	5.0	17	0-20

Laboratory Code	e: 207240-06 (Mat	trix Spike	e) B(1111/11.		
	Reporting	Spike	Sample	% Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Lead	ug/g (nnm)	20	5.9	74	50-150

Laboratory Code: Laboratory Control Sample % Recovery Reporting % Recovery Acceptance RPD Spike Analyte Units Level LCS LCSD Criteria (Limit 20) Lead μg/g (ppm) 20 103 101 80-120

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

e-mail: fbi@isomedia.com

August 20, 2002

Dan Wright, Project Manager WT Services Co. PO Box 239 Seahurst, WA 98062

Dear Mr. Wright:

Included are the results from the testing of material submitted on August 12, 2002 from your Minaglia-Duvall project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC

Michael Erdahl Project Manager

Enclosures NAA0820R.DOC

#### ENVIRONMENTAL CHEMISTS

Date of Report: 08/20/02 Date Received: 08/12/02 Project: Minaglia-Duvall Date Extracted: 08/13/02

Date Analyzed: 08/13/02 through 08/15/02

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as µg/g (ppm)

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 76-118)
0808-01 208060-01	0.04	0.29	0.13	0.55	37	97
0808-02 208060-02	< 0.02	< 0.02	<0.02	<0.02	3	108
0808-03 <sup>208060-03</sup>	0.08	0.81	0.78	2.4	400 ve	98
0812-01 208060-04	< 0.02	< 0.02	< 0.02	< 0.02	<1	111
0812-02 208060-05	<0.02	< 0.02	< 0.02	0.03	13	115
Method Blank	<0.02	<0.02	<0.02	<0.02	<1	112

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/20/02 Date Received: 08/12/02 Project: Minaglia-Duvall

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207207-12 (Duplicate)

_Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	μg/g (ppm)	< 0.02	< 0.02	nm
Toluene	μg/g (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	μg/g (ppm)	< 0.02	< 0.02	nm
Xylenes	μg/g (ppm)	< 0.02	< 0.02	nm
Gasoline	μg/g (ppm)	<1	<1	nm

Laboratory Code: 207207-12 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Benzene	μg/g (ppm)	0.5	< 0.02	112	110	34-136	1
Toluene	μg/g (ppm)	0.5	< 0.02	106	104	35-140	1
Ethylbenzene	μg/g (ppm)	0.5	< 0.02	103	102	37-150	1
Xylenes	μg/g (ppm)	1.5	< 0.02	111	110	36-143	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	μg/g (ppm)	0.5	102	100	60-122	2
Toluene	μg/g (ppm)	0.5	98	96	60-126	2
Ethylbenzene	μg/g (ppm)	0.5	96	95	56-130	1
Xylenes	μg/g (ppm)	1.5	103	104	58-128	1
Gasoline	μg/g (ppm)	20	107	116	43-143	8

puge 10 INF 8/12/02 01-2 TIME TURNAROUND TIME □ Dispose after 30 days□ Return samples□ Will call with instructions SAMPLE DISPOSAL Notes COMPANY ANALYSES REQUESTED 万万十 HEZ SAOCs py 8270 SAMPLE CHAIN OF CUSTODY **AOC8 PA 8560** PRINT NAME BLEX PY 8021B MINAGINA-DUV TPH-Gasoline SAMPLERS (signature) PROJECT NAME/NO. TPH-Diesel Sample Type | containers Jo# REMARKS 701  $\stackrel{\sim}{\sim}$ Phone # 106 215 - 6721 Fax # 20 6 242-947] City, State, ZIP Seah UV 55 WA 99062 Sevice ( Time Sampled SIGNATURE Date Sampled Relinquished by: Relinquished by: Receivedby Received by: Address 25 1304 236 . ID 70 03 99 0 2 Friedman & Bruya, Inc. Seattle, WA 98119-2029 3012 16th Avenue West Company () Clar 20-8086 Fax (206) 283-5044 Ph. (206) 285-8282 Sample ID SON 30 X0 10-2186 20-2180 Send Report To\_ 208060

DOD DOD SOUND SPRANT



#### Release of Liability/Certificate of Disposal

**Kryger Construction** is released from liability for all petroleum contaminated soil originating from:

N.E. Corner of Stewart & Main Duvall, Wa

and transported to:

Rinker Materials, Northwest Division. 6300 Glenwood Ave. Everett WA 98203

From 08/08/2002 through 08/09/2002

Digua M. Hutchings

A total of 235.65 tons of petroleum contaminated soil were transported to the above facility. The material was treated and disposed of in the following manner:

Thermal Desorption/Landfill for Reclamation

Treatment/Disposal of the contaminated soil was performed in accordance with all applicable federal, state, and local laws and regulations.

Signed:

Date: September 13, 2002

Diana M. Hutchings

Inside Sales Representative Soil Remediation Division

JOB 15802 MAIN ST. DUVALL WA FILE NO. 479-01

BY Dan Wright DATE 9/24/02 SHEET 20 OF 20



Washington State
Underground Storage Tank
Site Assessment

WRIGHT, DANIEL

has successfully completed the Washington State Competency Examination for Site Assessment of UST Petroleum Releases as required by WAC 173-360-600. Passing this exam demonstrates knowledge of regulations; standards, and practices pertaining to UST Site Assessment In Washington.



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#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

#### **Duvall Market**

15820 Main St NE Duvall, WA 98019 Y. C. H Enterprise Corportion

Prepared for

Pacific International Bank 1155 N. 130<sup>th</sup> St. Suite 100 Seattle, WA 98133

Prepared by

Envitech, Llc. 9528 226th PL NE Redmond, WA 98053

February 29, 2008

Project No. 01080122-1



ENVITECH

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February 29, 2008

Project No. 01080122-1

Mr. Robert Kim Pacific International Bank 1155 N. 130th St. Suite 100 Seattle, WA 98133

Attention:

YCH Enterprise Corporation.

Mr. Chinkuk Yi

Subject:

Phase I Environmental Site Assessment Report

**Duvall Market** 

15820 Main St NE, Duvall, WA 98019

Envitech, Llc. is pleased to submit two copies of our report describing the finding of the Phase I Environmental Site Assessment performed at the above property.

This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05) and "all appropriate inquiry" for the purposes of CERCLA sections 101(35)(B)(i)(i) and 101(35)(B)(ii) and (iii), as defined in Standards and Practices for All Appropriate Inquires; Final Rule, U.S.EPA, 40 CFR Part 312 (70 FR 66070).

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of this part [40 CFR Part 312]. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

If you have any questions or require further clarification of the report findings, please contact the undersigned at your convenience. Thank you for the opportunity to be of service to Pacific International Bank.

Yours very truly,

Jake S. Lee, Ph.D.

President Envitech, Llc.



#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

#### **Duvall Market**

15820 Main St NE Duvall, WA 98019

Prepared for

Pacific International Bank 1155 N 130<sup>th</sup> St. Suite 100 Seattle, WA 98133

Prepared by

Envitech, Llc. 9528 226th PL NE Redmond, WA 98053

February 29, 2008

Project No. 01080122-1



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#### **EXECUTIVE SUMMARY**

#### GENERAL INFORMATION

**Project Information** 

Project Name Duvall Market

Project No.

01080122-1

Site Information

**Duvall Market** 

15820 Main St NE, Duvall, WA 98019

**Consultant Information** 

Envitech, Llc.

9528 226th PL NE

Redmond, WA 98053

Phone

425-890-3517

Fax Email 425-310-6600

jakelee@envitechnology.com

County King

Latitude 47.743020

Longitude 121.985580

Owner Information

YCH Enterprise Corporation

(Mr. Chinkuk Yi)

Engagement date 01/22/2008

Inspection date 01/31/2008

Report date

02/29/2008

Client Information

Pacific International Bank

YCH Enterprise Corporation.

#### SUMMARY

Pacific International Bank engaged Envitech, Llc to conduct a Phase I Environmental Site Assessment (ESA) of the property, Duvall Market, located at 15820 Main St NE, Duvall, WA 98019, subsequently referred to in this report as "the subject property". This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05) and "all appropriate inquiry" for the purposes of CERCLA sections 101(35)(B)(i)(i) and 101(35)(B)(ii) and (iii), as defined in Standards and Practices for All Appropriate Inquires; Final Rule, U.S.EPA, 40 CFR Part 312 (70 FR 66070). This assessment also comply with SBA as outlined in the Small Business Administration Standard Operation Procedure (SOP 50-10(4)(B) Subpart "A" Paragraph 7. Environmental Considerations).



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The purpose of the Phase I ESA was to identify, to the extent feasible, Recognized Environmental Conditions in connection with the property. This assessment included a site reconnaissance as well as research and interviews.

The following is the results of this assessment:

 The address of the subject property is 15820 Main St NE, Duvall, WA 98019. The center of the subject property was located at Latitude 47.743020 and Longitude 121.985580

The subject property consists of a rectangular-shaped parcel of land with an approximately 10,373 square-foot (0.24 acres) that is improved with an approximately 6,744 square-foot 1-story commercial building.

The subject property is improved with a 1-story building that is currently occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market. The building was built in 1974.

- The results of this assessment have revealed no current Recognized Environmental Conditions associated with the subject property.
- The results of this assessment have revealed no historical Recognized Environmental Conditions associated with the subject property.
- The results of this assessment have revealed no de minimis conditions associated with the subject property.
- There are no data gaps that significantly affected our ability to identify Recognized Environmental Conditions associated with the subject property.
- The results of this assessment have revealed no Recognized Environmental Conditions associated with adjoining or surrounding properties that could affect the subject property.
- In our professional opinion, <u>no additional investigation</u> is necessary to detect the presence of hazardous substances and provide greater certainty regarding identified Recognized Environmental Conditions on the subject property.
- Envitech hereby recommends <u>no further action</u> on the subject property based on the current site conditions and available public records due to minimum risk of liability for site contamination and cleanup at the subject property.

Except for the limitations and exceptions discussed in Section 1.4, this Phase I ESA complies with the ASTM Standard 1527-05. No additional services beyond the scope of the ASTM Standard 1527-05 were conducted as part of this assessment.



#### 1. Introduction

Pacific International Bank engaged Envitech, Llc. (Envitech) to conduct a Phase I Environmental Site Assessment (ESA) of the property, Duvall Market, located at 15820 Main St NE, Duvall, WA 98019, subsequently referred to in this report as "the subject property". This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05) and "all appropriate inquiry" for the purposes of CERCLA sections 101(35)(B)(i)(i) and 101(35)(B)(ii) and (iii), as defined in Standards and Practices for All Appropriate Inquires; Final Rule, U.S.EPA, 40 CFR Part 312 (70 FR 66070). This assessment also comply with SBA as outlined in the Small Business Administration Standard Operation Procedure (SOP 50-10(4)(B) Subpart "A" Paragraph 7. Environmental Considerations).

#### 1.1. PURPOSE

The purpose of the Phase I ESA was to identify, to the extent feasible, existing or potential Recognized Environmental Conditions or historical Recognized Environmental Conditions (as defined by ASTM E1527-05) affecting the subject property.

#### 1.2. Scope of Services

The scope of work for this assessment was in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05). These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying Recognized Environmental Conditions.

The scope of work for the ESA includes the following activities:

- A Reconnaissance-level site visit and visual observation of neighbouring properties.
- A review of background information on the site setting and history of site usage.
- An evaluation of land use in the vicinity of the subject site.
- A review of regulatory records concerning the subject site and surrounding area.
- Preparation of report presenting our findings.



Typically a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if requested. For this Phase I ESA, no addition to the ASTM 1527-05 standard was made.

#### 1.3. SIGNIFICANT ASSUMPTIONS

While this report provides an overview of potential environmental concerns, both past and present, the environmental assessment is limited by the availability of information at the time of the assessment. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the property may have occurred which could not be identified. The conclusions and recommendations regarding environmental conditions that are presented in this report are based on a scope of work authorised by the Client. Note, however, that virtually no scope of work, no matter how exhaustive, can identify all contaminants or all conditions above and below ground.

#### 1.4. LIMITATIONS AND EXCEPTIONS OF ASSESSMENTS

The report has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM 1527-05, and contains all of the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

The conclusions of this report are based in part, on the information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, Envitech must be notified in order that we may determine if modifications to our conclusions are necessary.

The services performed and outlined in this report were based, in part, upon visual observations of the site and attendant structures. Our opinion cannot be extended to portions of the site that were unavailable for direct observation, reasonably beyond the control of Envitech.

The objective of this report was to assess environmental conditions at the site, within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, provincial and federal government laws and regulations was not included in our contract for services.



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Our observations relating to the condition of environmental media at the site are described in this report. It should be noted that compounds or materials other than those described could be present in the site environment.

#### 1.5. SPECIAL TERMS AND CONDITIONS

All appropriate inquiry into the prior uses of the subject property was made with god commercial and customary practices in order to identify and analyze RECs' constituting existing, past or potential environmental concerns in connection with the subject property.

#### 1.6. USER RELIANCE

This assessment was performed at the request of the client utilizing methods and procedures consistent with good commercial and customary designed to confirm with acceptable industry standard. The independent conclusions represent the best professional judgment of the environmental professional based on the conditions that existed and the information and data available to us during the course of assignment.

Factual information regarding operations, conditions, and test data provided by the client, owner, or their representative have been assumed to be correct and complete.

This report may be distributed and relied upon by Pacific International Bank, YCH Enterprise Corporation and its successors and assigns. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of Envitech.

#### 1.7. Non-CERCLA Considerations

Non-CERCLA considerations may include the following: asbestos-containing materials (ACMs), PCB-containing materials, lead-based paint, lead in drinking water, urea formaldehyde, wetlands identification, mold inspections, air quality inspections, or flood zone applicability.

Envitech did not conduct a review of non-CERCLA environmental risk during this investigation as per the agreed to the scope of work.



#### 2. SITE DESCRIPTION

A site visit was performed by Dr. Jake Lee, environmental professional, on Thursday, January 31, 2007. The observations noted in this section apply to the site as it appeared on that day. Site map showing general site layout are prepared in Appendix 1 – Site (Vicinity) Map.

#### 2.1. LOCATION

The address of the subject property is 15820 Main St NE, Duvall, WA 98019. The center of the subject property was located at Latitude 47.743020 and Longitude 121.985580 (Appendix 1 – Site Location Map).

#### 2.2. LEGAL DESCRIPTION

The legal description of the subject property is:

DUVALL PLAT OF DIV # 1

#### 2.3. SITE AND VICINITY GENERAL CHARACTERISTICS

The subject property consists of a parcel located on the southeast corner of Main St. NE and NE Virginia St. The setting of general area is mixed commercial and residential.

Duvall is a city in King County, Washington, United States, located on SR-203, approximately 25 miles northeast of Seattle, halfway between Monroe and Carnation.

#### 2.4. DESCRIPTION OF THE PROPERTY

County	King		
District	Duvall	Parcel Number	2130700470
Property Name	Duvall Market	<b>Property Type</b>	Commercial
Plat Name	DUVALL PLAT OF DIV NO.01	Present Use	Retail Store
Plat Block	9	Water System	Water District



Lot Area

10,373SqFt (0.24 acres)

Sewer System Public

S/T/R

NW 13 26 6

Street Surface Paved

The subject property consists of a rectangular-shaped parcel of land with an approximately 10,373 square-foot (0.24 acres) that is improved with an approximately 6,744 square-foot 1-story commercial building.

#### 2.5. DESCRIPTION OF STRUCTURE AND OTHER IMPROVEMENT

<b>Building Number</b>	1	<b>Building Quality</b>	Average
Number of Buildings	1	Description	Market
Year Built	1974	Construction Class	Masonry
Gross SqFt	6,744	Shape	Rect. or Slight Irreg.
Net SqFt	6,744	Heating	Forced Air Unit
Stories	1	Address	15820 Main St
Predominant Use	Market		Duvall, WA 98019

The subject property is improved with an 1-story building that is currently occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market. The building was built in 1974.

#### 2.6. PHYSICAL SETTING

The objective of reviewing physical setting is to provide information about the impact of potential environmental contaminant migration. Envitech reviewed the physical setting source provided by EDR GeoCheck (Appendix 3).

Current USGS 7.5 Minute Topographic Maps (47121-F8 Carnation, WA 1993) was reviewed to determine the topography of the subject property.

Topography	Elevation	80 feet above sea level	
	Slope	General WNW	
	Groundwater flow	N/A	



Regional Geology

Era

Cenozoic

Bedrock system

Quaternary

Bedrock series

Quaternary

Soil Survey

Soil component

TOKUL

Soil surface

Gravelly - loam

Radon

Zone 3

Indoor average level < 2 pCi/L

The surface elevation at the site is approximately 80 feet above mean sea level with a down-slope toward WNW. The highest elevation of the surrounding area within one mile is 390 feet above sea level, located approximately one (1) mile east of the subject property. The distance between the subject property and this location is intersected by Lake Rasmussen. Another area of increased elevation at 143 feet above sea level is located approximately 1 mile south of the subject property.

The Quad Map shows no physical features that may have environmentally impacted the subject property. The subject property and general area are identified as mixed commercial and residential.

Information on groundwater flow and soil type was obtained to determine the ease with which contaminants from surrounding properties can reach the subject property. The direction and velocity of groundwater flow in this area is unknown. The soil name is TOKUL. The dominant soil type of this area is gravelly - loam. This type of soil is moderately well drained. Soils have a layer of low hydraulic conductivity, wet state high in the profile. Depth to water table is 3 to 6 feet. Hydraulic infiltration rate is slow due to soils with layers impeding downward movement of water or soils with moderately fine or fine textures.



## 3. STANDARD ENVIRONMENTAL RECORD REVIEW

The purpose of the records review was to obtain and review records that will help identify Recognized Environmental Conditions in connection with the property.

Some records reviewed pertain not only to the property, but also to properties within an additional approximate minimum search distance in order to help assess the likelihood of problems from migrating hazardous substances or petroleum products. Unless stated otherwise the approximate minimum search distances used below were as specified in the ASTM Standard 1527-05.

A search of available federal and state environmental records was conducted by Environmental Data Resources, Inc. (EDR). The EDR Radius Report with GeoCheck (Report) for the subject property is included in Appendix 3. The provided Report meets or exceeds the regulatory records search requirements of ASTM E1527-05.

Discrepancies may exist between the EDR report and the findings of this research and reconnaissance regarding sites identified in the report. Listed facilities may not be plotted in correct locations or may be listed as unmapped sites because of incomplete or incorrect addresses or other inadequate data. When discrepancies occur, the finding of Envitech's site reconnaissance and other records review will take precedence over information provided by EDR.

A review of the regulatory information from this database search for possible Recognized Environmental Conditions (RECs) within the ASTM approximate minimum search distance is provided in the Federal and State sections below.

## 3.1. FEDERAL ENVIRONMENTAL RECORDS

Table 3-1. Summary of Federal Environmental Records

Record Source	Target Property	Surrounding Properties	Concern
NPL	None	None	No
Proposed NPL	None	None	No
Delisted NPL	None	None	No
CERCLIS	None	None	No
CERCLIS NFRAP	None	None	No
CORRACTS	None	None	No



Record Source	Target Property	Surrounding Properties	Concern
RCRA TSD	None	None	No
RCRA Generators	None	None	No
US Brownfield	None	None	No

The target property was not identified in the Federal Environmental Records.

The surrounding properties were not identified in the Federal Environmental Records.

# 3.2. WASHINGTON STATE AND LOCAL ENVIRONMENTAL RECORDS

Table 3-2. Summary of Washington State Environmental Records

Record Source	Target Property	Surrounding Properties	Concern
CSCSL	None	None	No
HSL	None	None	No
CSCSL NFA	None	None	No
State Landfill	None	None	No
LUST	None	3	No
UST	None	2	No
AST	None	None	No
Manifest	None	None	No
SPILLS	None	None	No
VCP	None	None	No
ICR	None	1	No
Brownfields	None	None	No
Others	None	None	No

The target property was not identified in any of the Washington State and local environmental database searched by EDR



Leaking Underground Storage Tanks (LUST) — the Leaking Underground Storage Tank Incident Records contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, and dated 09/10/2007 has revealed that there are three (3) LUST sites within approximately 0. 5 miles of the Subject Property.

MAP Distance Relative Name Comments ID (ft) Valley Shell 1 490 Higher Soil contamination by petroleum products. Reported cleaned up. Town Center Mini A2 1121 Higher Soil and groundwater contamination by Mart petroleum products. Awaiting cleanup. Cherry Valley Soil and groundwater contamination by 4 1223 Lower **Elementary School** petroleum products. Cleanup started.

Table 3-3. Summary of LUST sites.

Underground Storage Tanks (UST) – The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 09/10/2007 has revealed that there are two (2) USTsites within approximately 0.25 miles of the Subject Property.

Storage tanks in general are not a concern unless there is a spill associated with the tank (i.e., tank system failure or overfilling). Any documented spills associated with storage tanks are described in the CSCSL or LUST.

Independent Cleanup Report (ICR) - there are remedial action reports Ecology has received from either the owner or operator of the site. These actions have been conducted without department oversight or approval and are not under an order or decree.

A review of the ICR list, as provided by EDR, and dated 12/01/2002 has revealed that there is one (1) ICR site within approximately 0.5 miles of the target property.

Table 3-4. Summary of ICR sites.

Name	MAP Distance	Relative	Comments
	ID (ft)		



Name	MAP	Distance (ft)	Relative	Comments
Cherry Valley Elementary School	4	1223	Lower	Soil and groundwater contamination by petroleum products. Cleanup started.

#### 3.3. TRIBAL RECORDS

Table 3-5. Summary of Tribal Records

Record Source	Target Property	Surrounding Properties	Concern
Indian Reserv	None	None	No
Indian LUST	None	None	No
Indian UST	None	None	No

The target and surrounding properties were not identified in the Tribal Records.

Indian Lands — This may layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres. A review of the INDIAN RESERV list, as provided by EDR and dated 12/31/2005 has revealed that there is no INDIAN RESERV site within approximately 1 mile of the subject property.

## 3.4. EDR PROPRIETARY RECORDS

**Table 3-6. Summary of EDR Proprietary Records** 

Record Source	Target Property	Surrounding Properties	Concern
Manufactured Gas Plants	None	None	No
EDR Historical Auto Stations	None	None	No
EDR Historical Cleaners	None	None	No

The target and surrounding properties were not identified in the EDR Proprietary Records.



## 3.5. SUMMARY OF ENVIRONMENTAL RECORD SEARCH

- The target property was not listed in any of the databases searched by EDR.
- The Federal database search indicates that there are no surrounding sites.
- The State and local database search indicates that there are three (3) LUST, two
   (2) UST and one (1) ICR sites identified in the database search.
- Envitech's review of the database findings for vicinity sites indicates that none of
  the offsite areas would represent a risk of adversely affecting the subject
  property. Each of the identified vicinity sites are either in down- or crossgradient locations, the sites have been remediated to the satisfaction of
  regulations, no releases to the subsurface have been reported, or no violations
  have been reported.



## 4. HISTORICAL RECORD REVIEW

The objective of consulting historical sources is to develop a history of the previous use of the subject property in order to help identify the likelihood of past uses having led to Recognized Environmental Conditions in connection with the subject property. Standard Historical Records search in conformance with the scope and limitations of ASTM Standard Practice 1527-05 was conducted for the subject property. Envitech reviewed Standard Historical Records to identify the subject property use from 1940 or back to the property's obvious first use, whichever is earlier. Envitech obtained reasonably ascertainable historical data and conducted interviews with individuals knowledgeable about previous site usage.

Historical and physical setting resources available and reviewed for this subject property include:

•	Historical Topographic Map	The USGS 7.5 min. quad topo sheet(s) associated with the site: Target property: TP   1993   47121-F8 Carnation, WA
•	Sanborn Fire Insurance Map	Sanborn Fire Insurance Map covering the subject property was identified for the year 1930 and 1917 map.
	Aerial Photograph	Aerial Photographs depicting the subject property for the year 1952, 1971, 1983 and 1990 were identified through EDR search.

- City Directory City Directories covering the subject property and its adjoining properties for the year 1996 was identified.
- Other Sources County Assessor records; and user/owner interviews.

## 4.1. HISTORICAL TOPOGRAPHIC MAPS

- Envitech reviewed historical topographic maps for the year 1953, 1968, 1973 and 1993 for the target property from Environmental Data Resources (EDR), a historical research company (Appendix 4).
- The 1993 map shows the subject property is essentially in the current use and configuration.
- Review and evaluation of the Historical Topographic Maps provided no new information to indicate a recognized environmental condition on-site.



#### 4.2. SANBORN FIRE INSURANCE MAP

In 1867, the Sanborn Map Company began preparing detailed street maps of densely populated areas throughout the United States. The purpose of the mapping process was to assist insurance agents in rating the degree of fire hazard for a particular area or property. Sanborn Fire Insurance maps (Sanborn maps) contain detailed information on such building features as size, shape, construction type (and sometimes date), use, and street address. For hazardous material surveys, a review of existing and previous land use information is one component of environmental site assessments. Sanborn Maps are extremely useful in identifying former or abandoned underground storage tanks and aboveground chemical storage areas (Appendix 5).

The recent purchase by EDR on the Sanborn Map Company included the acquisition of all copyrights associated with the Sanborn Maps. The Sanborn copyright prohibits the photocopying of the maps without the prior written permission of EDR. However, EDR has granted permission for one set of photocopies to be made from the Sanborn Map that may be included in this report.

- Sanborn Fire Insurance Map covering the subject property was not identified through EDR search.
- The 1917 map shows that the subject property is undeveloped vacant land.
- The 1930 map shows that the subject property is undeveloped vacant land.

## 4.3. AERIAL PHOTOGRAPHS

Originally performed under government contracts, aerial photographs of the general area are available beginning with the 1940's. The scales for these aerials can range from 1" = 1667' to 1" = 2500"; aerials taken by private contractors were generally taken at lower altitudes and provide a larger scale. Depending upon the resolution, the photographs can provide valuable information on land use and site development of both the Subject and adjoining properties. Ultimately, the scale, clarify, and resolution serves as the limitations on visual interpretation. Envitech requested historical aerial photographs for the study area from EDR (Appendix 6). The interpretations are as follows:

- The subject property appears to be located within a generally developed setting.
- The 1952 and 1971 maps show that the subject property is a vacant land.



- The 1990 map shows that the subject property appears to be essentially in the current use and configuration.
- Review and evaluation of the Aerial Photographs provided no new information to indicate a recognized environmental condition on-site.

#### 4.4. CITY DIRECTORIES

- Envitech obtained and reviewed city directories from EDR (Appendix 7)
- The subject property is not listed in the Polk City Directory before 1966.
- The subject property is listed as:

Year	Uses
1996	Illusions Sports Bar & Grill
	Market Square Inc.

The adjoining properties are generally listed as commercial.

#### 4.5. OTHER HISTORICAL RECORDS

Recorded land titles — Recorded land titles are records usually maintained by the municipal clerk or county recorder of deeds that detail ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against the subject property in the local jurisdiction having control for or reporting responsibility to the subject property. Due to state land trust regulations and laws, land title records will often only provide trust names, bank trust numbers, owners' name, or easement holders, and not information concerning previous uses or occupants of the subject property. Additionally, environmental liens recorded against the subject property are considered outside the scope of recorded land title records. For these reasons, this Environmental Site Assessment has relied upon other standard historical information sources assumed either more accurate or informative than recorded land titles.

Envitech reviewed the County Assessor records concerning the subject property.
 The records indicate that the subject property was built in 1974 and operating as a commercial building known as Duvall Market.



 Review and evaluation of the Assessor records provided no new information to indicate a recognized environmental condition on the target property.

## 4.6. HISTORICAL USE ON THE SUBJECT PROPERTY

Period	Site Uses	Source
1917	Vacant area	Sanborn Map
1930	Vacant area	Sanborn Map
1974	Commercial Building (grocery store)	County Assessor
1996	Commercial Building (Illusions Sports Bar & Grill, Market Square Inc.)	City Directory
1998	Commercial Building (Illusions Sports Bar & Grill, Grocery)	User Interview
2002	Commercial Building (Dominos Pizza, Grocery)	Tenant Interview
2006	Commercial Building (Dominos Pizza, Coin Laundry, Grocery)	Tenant Interview
2007	Commercial Building (Pho Saigon Restaurant, Coil Laundry, Grocery)	Tenant Interview
2008	Commercial Building (Pho Saigon Restaurant & Duvall Main Street Laundry, Duvall Market)	Site visit

## 4.7. HISTORICAL USE ON ADJOINING PROPERTY

Period	Site Uses	Source
1022	The surrounding properties appear to be mixed	Topo map, Aeria
1933 -	commercial and residential.	photo

Envitech performed a Standard Historical Use of the Adjoining Properties in conformance with the scope and limitations of ASTM Standard Practice E 1527-05 and found no evidence of Recognized Environmental Conditions in connection with the Adjoining Properties that would lead to contamination of the subject property.



## 4.8. SUMMARY OF HISTORICAL PROPERTY USE

- The subject property was apparently undeveloped vacant land before 1974.
- The subject property was developed as a grocery store in 1974.
- The subject property has been used as a restaurant and grocery store between 1974 and 1996.
- The grocery store has been operated since its construction in 1974.
- The restaurant has been used as Illusions Sports Bar & Grill, Dominos Pizza, and then Pho Saigon Restaurant.
- The coin laundry shop and drop shop has been operated since 2006.
- Review and evaluation of site history provided no new information to indicate recognized environmental conditions on the subject property.



## 5. SITE RECONNAISSANCE

The purpose of the site reconnaissance is to obtain information indicating the likelihood of identifying Recognized Environmental Conditions in connection with the subject property.

### 5.1. METHODOLOGY AND LIMITING CONDITIONS

A site visit was performed by Dr. Jake Lee on January 31, 2008. The observations noted in this section apply to the subject property as it appeared on that day. The weather during the inspection was clear. An interior and exteriors walk-through investigation of the building and the site was performed. There was no visual or physical obstruction of the subject property. The exterior of adjoining properties were visually evaluated for any Recognized Environmental Conditions (RECs).

Site photographs taken during the site inspection are in Appendix 2. Additional information about the subject property was obtained from interviews with Mr. Chinkuk Yi, who has historical knowledge of operations of the property. Details are included in Appendix 11.

#### 5.2. GENERAL SITE SETTING

The address of the subject property is 15820 Main St NE, Duvall, WA 98019. The center of the subject property was located at Latitude 47.743020 and Longitude 121.985580.

The subject property consists of a rectangular-shaped parcel of land with an approximately 10,373 square-foot (0.24 acres) that is improved with an approximately 6,744 square-foot 1-story commercial building.

The subject property is improved with a 1-story building that is currently occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market. The building was built in 1974.

## 5.3. CURRENT USES OF ADJOINING PROPERTIES

An adjoining property is any real estate property whose border is contiguous or partially contiguous with the subject property, or that would be if the properties were not separated by a roadway, street, public thoroughfare, river or stream. The following identifies specific adjacent property tenants and/or use:



Direction	Site Use	Adjoining Street	
East	Unused Car Wash	Non-applicable	
West	Wet Land	Main St NE	
South	Vacant & Pet Supply Store	NE Stewart St	
North	Antique Shop	NE Virginia St	

## 5.4. VISUAL RECONNAISSANCE OF ADJOINING PROPERTIES

Envitech performed a visual reconnaissance of the Adjoining Properties in conformance with the scope and limitations of ASTM Standard Practice E 1527-05. Envitech found no visible evidence of Recognized Environmental Conditions in connection with the Adjoining Properties that could lead to contamination of the subject property.

## 5.5. HISTORICAL USE OF ADJOINING PROPERTIES

Period	Site Uses	Source	
1022	The surrounding properties appear to be mixed	Topo map, Aerial	
1933 -	commercial and residential.	photo	

Envitech performed a Standard Historical Use of the Adjoining Properties in conformance with the scope and limitations of ASTM Standard Practice E 1527-05 and found no evidence of Recognized Environmental Conditions in connection with the Adjoining Properties that would lead to contamination of the subject property.

## 5.6. EXTERIOR OBSERVATIONS

Item	Item Observed
Evidence of above ground storage tank	Not observed
Drums, barrels and/or containers (>5 gallon)	Not observed
Evidence of underground storage tank	Not observed
Sump, cisterns, catch basin and/or dry well	Not observed
Septic tank and/or leach fields	Not observed
Pipeline markers	Not observed
	Evidence of above ground storage tank Drums, barrels and/or containers (>5 gallon)  Evidence of underground storage tank Sump, cisterns, catch basin and/or dry well Septic tank and/or leach fields



Category	Item	Item Observed
PCB	Hydraulic Equipment	Not observed
Evidence of	Stressed vegetation	Not observed
(potential)	Stained soil	Not observed
releases	Stained pavement or similar surface	Not observed
	Leachate or waste seeps	Not observed
	Trash, debris and/or other waste materials	Not observed
	Dumping or disposal areas	Not observed
	Construction/demolition debris and/or dump fill dirt	Not observed
	Water discoloration, sheen, free floating product	Not observed
	Strong, pungent or noxious odors	Not observed
	Exterior pipe discharges, other effluent discharge	Not observed
	Discharge from roof drains	Not observed
	Discharge other than roof drains	Not observed
	Compressor blow down	Not observed
Other	Surface water bodies	Not observed
<b>Notable Site</b>	Quarries or pits	Not observed
Features	Wells	Not observed
Hazardous	Hazardous materials	Not observed
Petroleum	Petroleum products	Not observed
Wells	Portable	Not observed
	Irrigation	Not observed
	Industrial	Not observed
	Abandoned	Not observed

 There were no recognized environmental conditions observed during the exterior observations.

## 5.7. Interior Observations

Category	Item	Item Observed
AST	Evidence of above ground storage tank	Not observed
	Drums, barrels and/or containers (>5 gallon)	Not observed



UST	Evidence of underground storage tank equipment	Not observed
	Grease traps	Not observed
	Oil/water separators	Not observed
	Interior floor drains	Not observed
Evidence of	Stained pavement or similar surface	Not observed
(potential)	Laboratory hoods and/or incinerators	Not observed
releases	Waste treatment systems	Not observed
	Water treatment systems	Not observed
Hazardous	Hazardous materials	Not observed
Petroleum	Petroleum products	Not observed

 There were no recognized environmental conditions observed during the exterior observations.

#### 5.8. SUMMARY OF SITE RECONNAISSANCE

- The subject property has been used as a commercial building that is currently occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market.
- There were no recognized environmental conditions identified during the site reconnaissance.



## 6. INTERVIEWS

#### 6.1. USER PROVIDED INFORMATION

## Owner, Property Manager and Occupant Information

- The subject property is currently owned by YCH Enterprise Corporation and is occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market.
- Mr. Chinkuk Yi was identified as the Key Site Manager of the subject property.
- Mr. ChinKuk Lee of YCH Enterprise Corporation was identified as a user (owner) of the subject property.

#### **Title Records**

- Title company or professional was engaged by the client to review recorded land title records and lien records.
- A complete title report search and review was beyond the scope of work for this
  assessment.

## **Environmental Liens or Activity and Use Limitations**

- The user of the subject property is not aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law.
- The user is not aware of any Activity and Use Limitations (AULs), such as
  engineering controls, land use restrictions or institutional controls that are in
  place at the site and/or have been filed or recorded in a registry.

## Specialized Knowledge

- The user does not have any specialized knowledge or experience related to the property or nearby properties.
- No additional specialized knowledge, beyond that described elsewhere in this report, was provided to Envitech by the Client as part of this Phase I ESA.

## Commonly Known or Reasonably Ascertainable Information



- The user knows the following past use of the subject property: grocery store, coin laundry and restaurant.
- The user does not know of any specific chemicals that are present or once were present at the subject property.
- The user does not know of any spills or other chemical releases that have taken place at the subject property.
- The user does not know of any environmental cleanup that has taken place at the subject property.
- The user does not know of any environmental site assessments and/or environmental activities that have been conducted previously on the subject property.

#### Valuation Reduction for Environmental Issues

 The user believes the purchase price being paid for this property reasonably reflects the fair market value of the property.

## **Reason for Performing Phase I ESA**

The Phase 1 ESA was prepared by Envitech at the request of the client. The Phase 1 ESA was requested for one or more of the following reasons:

- Assist in the determination whether any immediate actions at the property are necessary to comply with environmental laws and regulations.
- Assist in the evaluation of legal and financial liabilities associated with the property.
- Assist in the evaluation of the property's overall development potential.
- Constitute partial or whole appropriate inquiry for purposes of CERCLA's innocent buyer defence.

#### Other

- The user knows of no indicators that point to the presence or likely presence of contamination at the subject property.
- The user does not have any other knowledge or experience with the property that may be pertinent to the environmental professional.



 The user operated the convenience store as a business owner in 1998. He purchased the commercial building in 2002.

#### 6.2. INTERVIEW WITH DUVALL MARKET BUSINESS OWNER

- Business owner: Mr. Wayne Park
- Mr. Park is an occupant since November 2003.
- Mr. Park is operating a grocery store.
- Mr. Park knows the following past use of the subject property: grocery store, coin laundry and restaurant.
- Mr. Park does not know of any specific chemicals that are present or once were present at the subject property.
- Mr. Park does not know of any spills or other chemical releases that have taken place at the subject property.
- Mr. Park does not know of any environmental cleanup that has taken place at the subject property.

### 6.3. INTERVIEW WITH COIN LAUNDRY BUSINESS OWNER

- Business owner: Maylea Coby.
- Ms. Coby is an occupant since last year.
- Ms. Coby is operating a coin laundry
- Ms. Coby knows the following past use of the subject property: grocery store, coin laundry and restaurant.
- Ms. Coby does not know of any specific chemicals that are present or once were present at the subject property.
- Ms. Coby does not know of any spills or other chemical releases that have taken place at the subject property.
- Ms. Coby does not know of any environmental cleanup that has taken place at the subject property.



#### 6.4. INTERVIEW WITH COIN LAUNDRY BUSINESS OWNER

- Business owner: My Yuay Tran.
- Ms. Tran is an occupant since last year (for 10 months)
- · Ms. Tran is operating a Pho Saigon Restaurant
- Ms. Tran knows the following past use of the subject property: restaurant (Sports bar -> Domino Pizza -> Pho Saigon Restaurant).
- Ms. Tran does not know of any specific chemicals that are present or once were present at the subject property.
- Ms. Tran does not know of any spills or other chemical releases that have taken place at the subject property.
- Ms. Tran does not know of any environmental cleanup that has taken place at the subject property.

#### 6.5. SUMMARY OF INTERVIEWS

- The owner and occupants know the following past use of the subject property: grocery store, coin laundry and restaurant.
- The owner and occupants do not know of any specific chemicals that are present or once were present at the subject property.
- The owner and occupants do not know of any spills or other chemical releases that have taken place at the subject property.
- The owner and occupants do not know of any environmental cleanup that has taken place at the subject property.
- There were no recognized environmental conditions identified during the interviews



#### 7. FINDINGS AND CONCLUSIONS

Pacific International Bank engaged Envitech, Llc to conduct a Phase I Environmental Site Assessment (ESA) of the property, Duvall Market, located at 4702-4720 Liberty Rd S, Duvall, WA 98019. This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05) and "all appropriate inquiry" for the purposes of CERCLA sections 101(35)(B)(i)(i) and 101(35)(B)(ii) and (iii), as defined in Standards and Practices for All Appropriate Inquires; Final Rule, U.S.EPA, 40 CFR Part 312 (70 FR 66070). This assessment also comply with SBA as outlined in the Small Business Administration Standard Operation Procedure (SOP 50-10(4)(B) Subpart "A" Paragraph 7. Environmental Considerations).

The purpose of the Phase I ESA was to identify, to the extent feasible, Recognized Environmental Conditions in connection with the property. This assessment included a site reconnaissance as well as research and interviews.

The results of this assessment have revealed the following findings:

Subject Property Characteristics – the address of the subject property is 15820
Main St NE, Duvall, WA 98019. The center of the subject property was located at
Latitude 47.743020 and Longitude 121.985580.

The subject property consists of a rectangular-shaped parcel of land with an approximately 10,373 square-foot (0.24 acres) that is improved with an approximately 6,744 square-foot 1-story commercial building.

The subject property is improved with a 1-story building that is currently occupied by Pho Saigon Restaurant, Duvall Main Street Laundry and Duvall Market. The building was built in 1974.

- 2. Standard Environmental Records The target property was not listed in any of the databases searched by EDR. The State and local database search indicates that there are three (3) LUST, two (2) UST and one (1) ICR sites identified in the database search. Envitech's review of the database findings for vicinity sites indicates that none of the offsite areas would represent a risk of adversely affecting the subject property.
- Historical Records The subject property has been used as a grocery store since
  its construction in 1974. A restaurant has been used as Illusions Sports Bar &
  Grill, Dominos Pizza, and then Pho Saigon Restaurant. The coin laundry and drop
  shop has been operated since 2006.



- 4. Site reconnaissance There were no recognized environmental conditions identified during the site reconnaissance.
- 5. Interviews The owner and occupants do not know of any specific chemicals that are present or once were present at the subject property. The owner and occupants do not know of any spills or other chemical releases that have taken place at the subject property. The owner and occupants do not know of any environmental cleanup that has taken place at the subject property.

The results of this assessment have revealed the following Recognized Environmental Conditions (RECs):

- The results of this assessment have revealed no current Recognized Environmental Conditions associated with the subject property.
- 2. The results of this assessment have revealed no historical Recognized Environmental Conditions associated with the subject property.
- The results of this assessment have revealed no de minimis conditions associated with the subject property.
- 4. There are no data gaps that significantly affected our ability to identify Recognized Environmental Conditions associated with the subject property.
- The results of this assessment have revealed no Recognized Environmental Conditions associated with adjoining or surrounding properties that could affect the subject property.
- In our professional opinion, <u>no additional investigation</u> is necessary to detect the presence of hazardous substances or petroleum products and provide greater certainty regarding identified Recognized Environmental Conditions on the subject property.

Except for the limitations and exceptions discussed in Section 1.4, this Phase I ESA complies with the ASTM Standard 1527-05. No additional services beyond the scope of the ASTM Standard 1527-05 were conducted as part of this assessment.



## 8. RECOMMENDATIONS

Envitech hereby recommends <u>no further action</u> on the subject property based on the current site conditions and available public records due to minimum risk of liability for site contamination and cleanup at the subject property.



## **CLOSURE**

This report has been prepared for the sole benefit of Pacific International Bank and YCH Enterprise Corporation. The report may not be relied upon by any other person or entity without the express written consent of Envitech, Pacific International Bank, and YCH Enterprise Corporation.

Respectively submitted,

Envitech, Llc.

Prepared by:

Jake S. Lee, Ph.D.

President Envitech, Llc.



#### REFERENCES

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ATTACHMENT E 2015 ECOLOGY – VCP ACCEPTANCE LETTER AND FURTHER ACTION LETTER



# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 22, 2015

MR. TED YI YCH ENTERPRISE CORPORATION 600 128<sup>TH</sup> AVE NE BELLEVUE, WA 98005

Re: Acceptance of VCP Application for the following Site:

• Site Name: Duvall Market

• Site Address: 15802 Main St, Duvall, WA 98019

• Facility/Site No.: 764631

• CS ID: 499

• VCP Project No.: NW2972

Dear Mr. Yi:

The Department of Ecology (Ecology) has accepted your Voluntary Cleanup Program (VCP) application for the Duvall Market facility (Site). We applied your initiative and welcome your interest in the VCP. This letter confirms your entry into the VCP and provides important information on how we will manage the Project.

#### Agreement

Ecology has completed and signed the VCP Agreement governing the Project. The effective date of the Agreement is May 22, 2015. A copy of the Agreement is enclosed. Please review it carefully.

#### Identification

Ecology has assigned a unique name and number to the **Site**. We have also assigned a unique number to your **Project** at the Site. You can find this information in the box at the bottom of the first page of the Agreement. When contacting us, please use this information to identify your Project.

(R) Charles And Edward

#### **Designated Managers**

Communications between Ecology and Duvall Market should be directed through their designated managers to the maximum extent possible.

Mr. Ted Yi May 22, 2015 Page 2

#### Ecology

We have designated the following site manager to respond to your requests:

Ms. Tamara Cardona-Marek

Department of Ecology Toxic Cleanup Program, NWRO 3190 160<sup>th</sup> Ave. SE Bellevue, WA 98008

Phone: (425) 649-7058

E-mail: taca461@ecy.wa.gov

#### Duvall Market

The application designated Mr. David Rankin as the project manager for the site. We will therefore respond only to his requests. If someone replaces him as the project manager or her contact information changes, please submit a Change of Contact Form. You may download the Form from our VCP web site:

http://www.ecy.wa.gov/programs/tcp/vcp/vcp2008/vcpForms.html

#### Requests for Written Opinions

In your application, you requested a written opinion on the sufficiency of your cleanup actions. Ecology will review the documents you submitted and provide you a written opinion within about 90 days.

#### Reporting Requirements

When requesting written opinions on planned or completed remedial actions, please comply with the following reporting requirements:

- 1. **Licensing.** Documents submitted containing geologic, hydrologic, or engineering work must be under the seal of an appropriately licensed professional, as required by Chapters 18.43 and 18.220 RCW.
- 2. **Data Submittal.** Environmental sampling data must be submitted in both a printed form and an electronic form capable of being transferred into our data management systems. For instructions on how to submit data, please refer to the following web site:

  www.ecv.wa.gov/programs/tcp/data\_submittal/data\_requirements.htm.

Failure to comply with these requirements may result in unnecessary delays.

Mr. Ted Yi May 22, 2015 Page 3

#### **Payment**

Ecology will send monthly invoices to you, the billing contact designated in the Application Form. If someone replaces you as the billing contact or your contact information changes, please submit a Change of Contact Form. The Form is available on the VCP web site.

The invoice will include a summary of the costs incurred, payments received, identity of staff involved, and the amount of time spent on the Project during the previous month. Payment is due within thirty days of the invoice date. For more information on the billing system, please refer to the VCP web site.

#### **Contact Information**

We are committed to working with you to accomplish the prompt and effective cleanup of the Site. Again, if you have any questions about the VCP or your Project, please contact Ms. Tamara Cardona-Marek at (425) 649-7058.

Sincerely,

Diane Escobedo

Toxics Cleanup Program, NWRO

DE:de

Enclosure:

Copy of VCP Agreement

cc:

David K. Rankin, Kane Environmental Inc. (e-mail)

Dolores Mitchell, VCP Financial Manager

## VCP AGREEMENT



INSTRUCTIONS: Submit this Agreement (original) to Ecology as part of your Application. Before submitting, enter the Customer's name and the Site's address on the first page and sign the Agreement on the second page. If your Application is accepted, then Ecology will do the following: 1) identify the Site and VCP project in the box below; 2) sign the Agreement; and 3) send you a copy of the completed Agreement.

This document constitutes an Agreement between the State of Washington Department of Ecology (Ecology) and YCH Enterprise Corporation

(Customer) to provide informal site-specific technical consultations under the Voluntary Cleanup Program (VCP) for the Site identified below and associated with the following address:

15820 (15802 to 15820) Main Street; King County, Duvall, WA 98019

The purpose of this Agreement is to facilitate independent remedial action at the Site. Ecology is entering into this Agreement under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC. If a term in this Agreement is defined in MTCA or Chapter 173-340 WAC, then that definition shall govern.

#### Services Provided by Ecology

Upon request, Ecology agrees to provide the Customer informal site-specific technical consultations on the independent remedial actions proposed for or performed at the Site consistent with WAC 173-340-515(5). Those consultations may include assistance in identifying applicable regulatory requirements and opinions on whether the remedial actions proposed for or conducted at the Site meet those requirements.

Ecology may use any appropriate resource to provide the Customer with the requested consultative services. Those resources may include, but shall not be limited to, those of Ecology and the Office of the Attorney General. However, Ecology shall not use independent contractors unless the Customer provides Ecology with prior written authorization.

In accordance with RCW 70.105D.030(1)(i), any opinions provided by Ecology under this Agreement are advisory only and not binding on Ecology. Ecology, the state, and officers and employees of the state are immune from all liability. Furthermore, no cause of action of any nature may arise from any act or omission in providing, or failing to provide, informal advice and assistance under the VCP.

#### Payment for Services by Customer

The Customer agrees to pay all costs incurred by Ecology in providing the informal site-specific technical consultations requested by the Customer consistent with WAC 173-340-515(6) and 173-340-550(6). Those costs may include the costs incurred by attorneys or independent contractors used by Ecology to provide the requested consultative services. Ecology's hourly costs shall be determined based on the method in WAC 173-340-550(2).

Ecology shall mail the Customer a monthly itemized statement of costs (invoice) by the tenth day of each month (invoice date) that there is a balance on the account. The invoice shall include a summary of the costs incurred, payments received, identity of staff involved, and amount of time staff spent on the project.

The Customer shall pay the required amount by the due date, which shall be thirty (30) calendar days after the invoice date. If payment has not been received by the due date, then Ecology shall withhold

FOR COMPLETION	Facility / Site Name:	Duvall Markett	RECEIVED
BY ECOLOGY	Facility / Site No.:	71041031	rrn 12 2015
ONLY	VCP Project No.:	NWZ97Z	DEPT OF ECOLOGY
ECY 070-324 (revised July 2008)			TCP-NWRO

any requested opinions and notify the Customer by certified mail that the debt is past due. If payment has not been received within sixty (60) calendar days of the invoice date, then Ecology shall stop all work under the Agreement and may, as appropriate, assign the debt to a collection agency under Chapter 19.16 RCW. The Customer agrees to pay the collection agency fee incurred by Ecology in the course of debt collection.

#### Reservation of Rights / No Settlement

This Agreement does not constitute a settlement of liability to the state under MTCA. This Agreement also does not protect a liable person from contribution claims by third parties for matters addressed by the Agreement. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). Ecology's signature on this Agreement in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority.

Ecology reserves all rights under MTCA, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

#### Effective Date, Modifications, and Severability

The effective date of this Agreement shall be the date on which this Agreement is signed by the Toxics Cleanup Program's Section Manager or delegated representative. This Agreement may be amended by mutual agreement of Ecology and the Customer. Amendments shall be in writing and shall be effective when signed by the Toxics Cleanup Program's Section Manager or delegated representative. If any provision of this Agreement proves to be void, it shall in no way invalidate any other provision of this Agreement.

#### **Termination of Agreement**

Either party may terminate this Agreement without cause by sending written notice by U.S. mail to the other party. The effective date of termination shall be the date Ecology sends notice to the Customer or the date Ecology receives notice from the Customer, whichever occurs first. Unless otherwise directed, issuance of a No Further Action opinion, either for the Site as a whole or for a portion of the real property located within the Site, shall constitute notice of termination by Ecology.

Under this Agreement, the Customer is only responsible for costs incurred by Ecology before the effective date of termination. However, termination of this Agreement shall not affect any right Ecology may have to recover its costs under MTCA or any other provision of law.

#### Representations and Signatures

The undersigned representative of the Customer hereby certifies that he or she is fully authorized to enter into this Agreement and to execute and legally bind the Customer to comply with the Agreement.

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY	YCH Enterprise Corporation
DELITITION EGGEGGT	Name of Customer
Louise Bardy	mm
Signature	Signature
LOUISE BARDY	Ted Yi (Chinkuk Yi)
Printed Name for	Printed Name of Signatory
Section Manager, Robert W. Warren Top	Owner
Toxics Cleanup Program Section	Title of Signatory
Date: 5/15/15	Date: 2/9/2015

If you need this document in an alternative format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



# Voluntary Cleanup Program

## Washington State Department of Ecology Toxics Cleanup Program

## APPLICATION FORM

Under the Voluntary Cleanup Program (VCP), the Department of Ecology (Ecology) may provide informal site-specific technical consultations to persons conducting independent remedial actions at a hazardous waste site. Ecology may provide such consultations under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC.

To enter the VCP, complete and submit to Ecology a VCP Application. The Application consists of the following two documents:

- 1. Application Form (including required attachments). THIS DOCUMENT
- 2. Agreement.

For guidance on how to complete your Application, please refer to the Application Instructions, which are available separately on the VCP web site: <a href="https://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm">www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm</a>.

Part 1 - ADMINISTRATION					
<b>A. Customer Information.</b> The Customer is the person or organization requesting services from Ecology under the VCP, and is responsible for paying the costs incurred by Ecology. The authority and duty of the Customer are explained in the Agreement.					
Name of Customer:					
What type of entity is the Custor	mer?				
□ Person	If the Customer is a "person," then the Cu the Project Manager and the Project Billing this person and their contact information in	g Contact. Please identify			
☐ Organization	If the Customer is an "organization," then please identify the Project  Manager in Part 1B and the Project Billing Contact in Part 1C. Both  persons must be employed by the Customer organization.				
What is the Customer's involvement at the Site? Please check all that apply.					
	Business owner (operator)	RECEIVED			
Future property	owner Consultant	FEB 13 2015			
Property lessee Other – please		DEPT OF ECOLOGY TCP-NWRO			
If not the current property owner, is the Customer acting as the agent for the property owner?					
☐ Yes ⊠ No					
If not the current property owner, is the Customer authorized to grant access to the property?					
☐ Yes ⊠ No					

# Part T = ADMINISTRATION continued

B. Project Manager Information person must either be the Custo independent contractor hired by the second s	omer or be employed	ed by the Cu	ıstomer	This person may not be an	
Name: David K. Rankin, LHG, LE	EG – Kane Environr	nental Inc.	Title: Pr	ogram Manager	
Mailing address: 3815 Woodland	Park Ave N, Suite	102			
City: Seattle		State: WA		Zip: 98103	
Phone: 971-322-9330	Fax: 206-675-065	0	E-mail: drankin@kane- environmental.com		
C. Project Billing Contact Informust either be the Customer or be contractor hired by the Customer.	e employed by the (	Customer. Th	nis person	may not be an independent	
Name: YCH Enterprise Corporation	on (Ted Yi)		Title: Ov	vner	
Mailing address:	600 128th	Ave NE			
City: Bellevue		State: WA		Zip: 98065	
Phone: 206-412-8562	Fax:		E-mail: yi	land@comcast.net	
D. Project Consultant Informati	on.				
Is the Customer a consultant?	,				
☐ Yes If you ans	wered "YES," then	skip to the ne	ext auestio	n.	
⊠ No. If you ans		the Custome	er hired a	consultant to conduct the	
Name: SEE SECTION B			Title:	Title:	
Organization:					
Mailing address:					
City:		State:		Zip:	
Phone:	Fax:		E-mail:		
Do you want Ecology to contact the	e Project Consultan	t?			
E. Property Owner Information.					
Is the Customer the owner of the p	roperty where indep	pendent reme	dial action	is being conducted?	
Commence :				d skip to the next question.	
				iired information below.	
Name:			Title:		
Organization:					
Mailing address:					
City:		State:		Zip:	
Phone:	Fax:		E-mail:	,	

性的原因,但也是有可能的 <b>是是</b> 的时候,但是因为他们的是是是是自己的,但是是一个人,但是一个人的,但是一个人的,但是是一个人的,也是是一个人的,也是是一个人的。但是
What type of entity is the property owner? Please check only one.
Private County Tribal Municipal Federal Mixed State Public School Other – please specify:
F. Request for Written Opinion.
Are you requesting a written opinion at this time?  ☐ Yes ☒ No
If you answered "YES," on what planned or completed remedial action do you want a written opinion?
Please attach to this Application any additional remedial action plans or reports you wan Ecology to review. Ecology will base its opinion on the information contained in the Site file, including any information attached to this Application.
If you answered "NO," please explain why you are enrolling in the VCP at this time and when you expect to request a written opinion from Ecology.  Additional sampling/testing work is needed to complete work stopped in 2002 by the previous owner.
Conducting assessment of residual contamination that may be impacting the roadway off-site.
Report expected to be submitted to VCP for review/opinion in late February 2015.
The owner needs a VCP opinion before July 1, 2015 as the bank extended the loan until July 1.
Owner has a prospective buyer who needs to see a NFA.
Attach additional pages if necessary.
G. Reporting Requirements.
Please comply with the following reporting requirements when requesting written opinions on planned or completed remedial actions:
■ Licensing. Documents submitted containing geologic, hydrologic, or engineering work must be under the seal of an appropriately licensed professional, as required by Chapters 18.43 and 18.220 RCW.
Data Submittal. Environmental sampling data must be submitted in both a printed form and an electronic form capable of being transferred into Ecology's data management systems. For instructions on how to submit the data, please refer to the following Ecology web site: <a href="https://www.ecy.wa.gov/programs/tcp/data">www.ecy.wa.gov/programs/tcp/data</a> submittal/Data Requirements.htm.
Failure to comply with these requirements may result in unnecessary delays. <b>Ecology will not issue a</b>

	THE RESIDENCE OF THE PERSON OF						
Part 2 - DESCRIPTION OF THE SITE							
A. Name of the Site. If Ecology has already identified the Site, enter the name provided by Ecology. Otherwise, enter a suggested name for the Site. You may also include an alternate name.							
Name: Duvall Mar	rket (WA Ecology	Faci	lity/Site No.: 7	646	6431, WA Ecology	Clea	anup Site 499)
Alternate Name: r	none						
B. Location of P	roperty where th	e Re	leases Occur	rrec	l (Source Propert	ty).	
For example, if pe	The "source property" is the property where hazardous substances were released into the environment. For example, if petroleum was released from a leaking UST, the source property is the property where the UST was located.					ed into the environment. rty is the property where	
Do you know on w	hich property the	relea	ses occurred	?			
⊠ Ye	es If you ans answering t	were he fo	d <b>"YES,"</b> the llowing question	en ons	please refer to	the	source property when
☐ No	lf you ansv remedial ac	verea tion (	" <b>NO</b> ," then cleanup) wher	ple n ai	ase refer to the passivering the follow	prop ving	erty addressed by your questions.
Physical Address	. Please enter th	e phy	sical address	of t	he property below		
Street Address: D	uvall Market - 158	320 ( <i>°</i>	15802 to 1582	1 (02	Main Street		×
City: Duvall	City: Duvall State: WA Zip: 98019					o: 98019	
Geographic Positi guidance on how to	<i>tion.</i> Please ento complete this p	ter th art, p	e geographica lease refer to i	al p inst	osition of the pro	perty CP w	y below. For additional reb site.
COORDINATES	LATITUDE:	Degrees: 47			Minutes: 44		Seconds: 33
GOOKDINATES	LONGITUDE:	Degrees: 121			Minutes: 59		Seconds: 08
	ION ON PROPERTY: ase or center of parcel	Southwest corner near intersection of Main and Stewart streets					
	LECTION METHOD: For address matching]	Google Earth					
Col	LECTION SOURCE: [i.e., map scale]	1:12,000 (1"=100 feet)					
	ORIZONTAL DATUM: for coordinate system]	NAD8	33				
ACCURACY LEVEL: 0.5 for			ot				
Legal Description	i.e., +/- feet or meters]						
TRS DATA:	Township: 26N		Range: 8E		Section: 13**	Qua	rter-Quarter: CC
		7, #2	13070-0460-07	and	I #213070-0470-05		
Tax Parcel #(s):	** note: Ecology o	nline	shows Section	17,	actually it is #13.		

# Part 2 - DESCRIPTION OF THE SITE continued

C. I	dentification of Pro	perties affected by the Releases (Affected Properties).				
prop	erty. For example, p	a property affected by the release of hazardous substances on the source petroleum released from a leaking UST on one property (source property) may r ground water onto an adjacent property (affected property).				
Do a	ny of the releases af	fect any properties adjacent to the source property?				
	☐ Yes	If you answered "YES," then please identify below each property that you know has been affected by the releases on the source property. If you need to identify additional properties, please attach additional pages.				
	⊠ No	If you answered "NO," then skip to the next question.				
	Unknown	If you answered "UNKNOWN," then skip to the next question.				
1.	Address: not applic	able				
	Tax Parcel(s): not a	applicable				
2.	Address:					
	Tax Parcel(s):					
3.	Address:					
0.	Tax Parcel(s):					
4.	Address:					
	Tax Parcel(s):					
D. Io	lentification of Publ	ic Right-of-Ways affected by the Releases.				
Do ai	ny of the releases aff	ect any public right-of-ways (e.g., streets)?				
	Yes	No 🖂 Unknown				
If you	answered "YES" ab	ove, please specify below. Otherwise, skip to the next question.				
Curr	ently assessing poter	ntial (see Section F of this form)				
If co	ntaminated, likely mu	ch less than 5,000 sq ft, based on data in Ecology's files				
Attacl	additional pages if neces	ssary.				
E. Ex	ctent of the Site.					
What	is the approximate a	real extent of the Site? Please check only one.				
	□ > 5,000 s					

# Part 2 - DESCRIPTION OF THE SITE continued

F. Description of Release(s) at the Site.
Source of Release(s).
What are the source(s) of the release(s) at the Site? Please check all that apply.
Point source (e.g., leaking tank)  Non-point source (e.g., contaminated soil used as fill)  Area-wide lead and arsenic soil contamination (see questions below)  Other – please specify:  Unknown
To the extent known, please describe the source(s) of the release(s):
Gasoline tank removed
Gasoline contaminated soil removed to edge of property in 2002 time frame.
Residual contamination at property line shows Gx and benzene in soil slightly above MTCA –A/B
See Ecology files.
Attach additional pages if necessary.
<i>Circumstances of Release(s).</i> To the extent known, please describe below the circumstances of the release(s).
Gasoline UST. See Ecology files.
Attach additional pages if necessary.
Circumstances of Release Discovery. To the extent known, please describe below the
circumstances of the discovery of the release(s).
During UST removal. See Ecology files.
Attach additional pages if necessary.

## Pari 2 - DESCRIPTION OF THE SITE continued

Area-Wide Soil Contamination. For inform refer to the following web site: <a href="www.ecy">www.ecy</a> information about the Tacoma Smelter Plum to the following web site: <a href="www.ecy.wa.gov/pr">www.ecy.wa.gov/pr</a>	<u>/.wa.gov/pro</u> e (TSP) and	ograms/tcp/a d the associa	<u>rea_wide/ar</u> ated Manage	<u>rea_wide_hp.</u> ement Plan, p	html. For
Is the Site located within an area affected by	smelter em	nissions, suc	h as the TS	P area?	
☐ Yes	nown				
To determine whether your Site is located w site identified above.	ithin the TS	P area, plea	se refer to t	he map on th	e TSP web
Is the Site located on a former apple or pear	orchard in	operation pri	or to 1947?		
☐ Yes	iown				
Is the Site impacted by area-wide arsenic an	nd/or lead so	il contamina	tion?		
☐ Yes	iown				
G. Nature and Extent of Hazardous Subst to conditions after the release, but prior to an	y cleanup, c	of the hazard	lous substar	nces at the Si	te.
Hazardous Substances and Affected Meditable the hazardous substances released at t substances. Use the codes at the bottom of	the Site and	xtent known, the media (e	please ider e.g., soil) im	ntify in the fol pacted by the	lowing ose
		Α	FFECTED MED	DIA	
Hazardous Substance	Soil	GROUND WATER	Surface Water	SEDIMENT	Air
EXAMPLE: Benzene	С	S	N/A	N/A	В
TPH-Gx (gasoline range)	С	N/A	N/A	N/A	N/A
Benzene	С	N/A	N/A	N/A	N/A
When identifying the affected media in the table above, please  • C = confirmed, above cleanup level	use one of the f	following codes:			
B = confirmed, below cleanup level					
• O = confirmed, not present					
S = suspected  N/A = not suspected					
<ul><li>N/A = not suspected</li><li>U = unknown</li></ul>					

## Part 2 - DESCRIPTION OF THE SITE continued

Drinking Water.
Does any of the contamination at the Site pose a threat or potential threat to an existing drinking water source (ground water or surface water)?
☐ Yes      ☐ Unknown
If you answered "YES" above, what type of drinking water system is threatened by the contamination? Please check all that apply.
<ul><li>☐ Single Family</li><li>☐ Public Drinking Water Supply</li></ul>
If you checked "Public Drinking Water Supply" above, is the contamination located within or upstream of a 10-year wellhead protection area?
Yes No Unknown
To help answer the above question or if you answered "Yes" to that question, then go to <a href="https://fortress.wa.gov/doh/eh/dw/swap/maps/">https://fortress.wa.gov/doh/eh/dw/swap/maps/</a> or call (800) 521-0323.
Indoor Air.
Are contaminant odors present in any buildings, manholes, or other confined spaces?
☐ Yes ⊠ No ☐ Unknown
If you answered "YES" above, please specify:
FYI, No buildings within 60 feet of zone of contamination
Attach additional pages if necessary.
H. Maps of the Site.
Please attach to this application map(s) that identify, to the extent known, the following:
<ul> <li>□ The location of the site.</li> <li>□ The properties, and any public right-of ways, affected by the site.</li> <li>□ The source(s) of the release(s) at the site.</li> <li>□ The nature and extent of contamination at the site.</li> <li>□ Any human or ecological receptors impacted by the site (e.g., drinking water wells).</li> <li>□ The physical characteristics of the site (e.g., property lines, building and road outlines, surface water bodies, water supply wells, ground water flow direction, and utility right-of-ways).</li> <li>□ The properties adjacent to the site and the uses of those properties (e.g., gas station, dry cleaner, residential).</li> </ul>

Part 3 – OPERATIONAL H	STORY OF THE SITE					
A. Current Use of Source Property, not other properties	Property. Note that to affected by the Site. Ans	he following swerthese q	questions questions to	refer only to the Source the best of your ability.		
Current Property Owners. property.	Γο the extent known, plea	se identify b	elow the cu	rrent owner of the source		
Name: See Part 1 – Section	С	Title	ə:			
Organization:						
Mailing address:						
City:		State:		Zip code:		
Phone:						
Current Business Owner (O the business located on the so		nown, pleas	e identify be	elow the current owner of		
Name:		Title	e:			
Organization:		•				
Mailing address:						
City:		State:		Zip code:		
Phone:						
Current Business Operation the business located on the so		, please ide	ntify below	the current operations of		
What is the current land use o	f the source property? Pl	ease check	all that appl	у.		
	School Childcare facility Park specify: Grocery over 60 moved from source area (					
Is there a currently operational	l commercial or industrial	business lo	cated on the	e source property?		
☐ Yes ⊠ No	Unknown					
If you answered "YES" above using the North American Indu	e, please identify in the ustry Classification Syster	following ta n (NAICS) c	ble the curred	rent business operations pecifying the operations.		
NAICS CODE	CS CODE DESCRIPTION OF OPERATIONS					
EX: 447110	Gasoline Stations with Con	venience Sto	ores			

## Part 3 – OPERATIONAL HISTORY OF THE SITE continued

Is there a solid waste handling fac	cility located on the Source Propert	v?	- And - Control				
☐ Yes ☐ No	Unknown	,					
If you answered "YES" above, please identify:							
Il you allowered TES above, ple	ase identity.						
Attach additional pages if necessary.							
	nent, storage, or disposal facility loo —	cated on the	e Source Property?				
☐ Yes ☒ No	Unknown						
If you answered "YES" above, ple	ase identify:						
Attach additional pages if necessary.							
Regulation of Current Business	o Operations.						
Does the business operate under	any federal, state, or local permits	related to t	he release of hazardous				
substances into the environment	(e.g., NPDES permit)?						
☐ Yes ⊠ No	Unknown						
If you answered "YES" above, ple date it was issued in the table bel	ease specify the regulated operations.  Ow.	on, the nam	e of the permit, and the				
REGULATED OPERATION	PERMIT		DATE ISSUED				
EX: Wastewater discharge	rge NPDES permit		02/02/02				
Has a state or federal notice of en	forcement action (e.g., notice of vi	olation) eve	r heen issued related to				
the release of hazardous substance		olation, ove	r booti loodod rolated to				
⊠ Yes □ No	Unknown						
If you answered "yes" above, plea	se specify (notice and year issued)	): March 20	006 Ecology Letter				
"Notification of Pending Inactive D	etermination Status". Issued follow	ving previou	us owner's halting				
activity in 2002.							
Have business operations resulted property?	ed in any other spills or other un	permitted r	releases on the source				
☐ Yes ⊠ No	Unknown						
If you answered "YES" above, plea	ase specify in the table below.						
RELEASE DATE OF RELEASE STATUS OF RELEASE							

### Part 3 – OPERATIONAL HISTORY OF THE SITE continued

**Storage Tank Information.** In table below, please identify all above ground storage tanks (AST) and underground storage tanks (UST) that have been used for storing hazardous substances on the source property, irrespective of whether the tanks are still in use or in place. If you are unable to provide answers to specific questions regarding a tank, please enter "U" for unknown.

IDENTIFICATION				STATUS AND CLOSURE				RELEASES	
Hazardous Substance		Size (Gallons)	I I ANK II)		IN USE (Y/N)	DATE CLOSED	CLOSURE METHOD (*)	Past (Y/N)	CURRENT (Y/N)
EX: Diesel	UST	10,000	4	02/87	N	05/98	Removed	Υ	N
Gasoline likely, empty during removal	UST	675	А	unk	N	07/02	Removed	Υ	NA
Gasoline likely, empty during removal	UST	4,000	В	unk	N	07/02	Removed	Υ	NA.

(\*) Options = Removed or Closed in Place

**B. Past Use of Source Property.** Note that the following questions refer only to the Source Property, not other properties affected by the Site. Please answer these questions to the best of your ability.

**Past Property Owners.** To the extent known, please identify below the owner of the source property at the time the release occurred.

Name: Helmuth Schlueter				Title: previous owner			
Organization: self							
Mailing address: 26321 NE Valle	y Street (PO Box 40	)					
City: Duvall State: WA Zip code: 98019							
Phone: 425-788-1544	Fax: NA			E-mail: N	NA		
Past Business Owners (Operators). To the extent known, please identify below the owner of the business (operator) at the time the release occurred.							
Name:			Title:				
Organization:							
Mailing address:							
City:		State:			Zip code:		
Phone:	Fax:			E-mail:			

**Identification of Past Business Operations.** Please identify in the following table the past operations of businesses located on the source property using the North American Industry Classification System (NAICS) codes and/or specifying the operations.

NAICS CODEDESCRIPTION OF OPERATIONSEX: 447110Gasoline Stations with Convenience Stores					

# Part 3 - OPERATIONAL HISTORY OF THE SITE continued

C. Future Use of Source and Affected Properties. The following questions refer to both source and affected properties. Please answer these questions to the best of your ability.
Will any ownership interest in the source or affected properties be conveyed prior to, or upon completion of, the cleanup?
☐ Yes ☐ No ☒ Unknown
If you answered "YES" above, please specify:
TBD
Attach additional pages if necessary.
Will any of the source or affected properties, or portions of those properties, be redeveloped as part of the cleanup?
☐ Yes ☐ No ☒ Unknown
If you answered "YES" above, please specify the proposed land use below. Please check all that apply.
Residential School Commercial Childcare facility Industrial Park Agricultural Other – please specify:
Please also specify the activities proposed for that land use:
Attach additional pages if necessary.

Part 4 – ADMINISTRATIVE HISTORY OF THE SITE
Have you previously reported the release(s) of hazardous substances at the Site to Ecology?
☐ Yes – If so, when? ⊠ No ☐ Unknown
Has the cleanup of the Site, or any portion of the Site, ever been managed under the VCP?
Yes – If so, please specify the VCP Project Number: 7646431  No Unknown
Has the cleanup of the Site, or any portion of the Site, ever been managed under a federal or sta order or decree?
Yes – If so, please specify the type and docket number:  No Unknown
Part 5 – DESCRIPTION OF INDEPENDENT REMEDIAL ACTIONS AT THE SITE
A. Scope of Remedial Actions.
Do you plan to characterize and address all of the contamination at the Site, including ar contamination located on affected adjacent properties, as part of the VCP project?
⊠ Yes □ No □ Unknown
If you answered "NO" above, please describe below the scope of the VCP project, including the contamination (properties, portions of a property, media and/or hazardous substances) that you Do NOT plan on characterizing and/or addressing as part of the VCP project. Please include additional pages if necessary.
On-going. See Part 1 – Section F of this form.
<u> </u>
Attach additional pages if necessary.

### Part 5 – DESCRIPTION OF INDEPENDENT REMEDIAL ACTIONS AT THE SITE continued

### B. Status of Remedial Actions.

What is the current status of remedial actions at the site? Please check all that apply in the table below.

REMEDIAL ACTION	PLANNED	Ongoing	COMPLETED	NOT APPLICABLE
INITIAL RESPONSE (UST ONLY)			X	
INTERIM ACTION			X	
REMEDIAL INVESTIGATION		X		
FEASIBILITY STUDY		X		
CLEANUP ACTION	If needed			

### C. Documentation of Remedial Actions.

Please list in the table below all known remedial action plans or reports produced for the site, including:

- The title of the plan or report,
- The author (e.g. consulting firm) of the plan or report,
- The date the plan or report was produced,
- Whether the plan or report has been submitted to Ecology,
- The date the plan or report was submitted to Ecology.

	Tirle	Author	DATE	SUBMITTED TO ECOLOGY		
		Author	DATE	Y/N?	DATE	
Ex:	John Doe's Site: Remedial Investigation Work Plan	Mom's Consulting Firm	02/20/05	NO	N/A	
1.	See Ecology file which duplicative of the owner's file on the UST removal, removal of 236 tons of contaminated soil and post-removal follow-up testing of contamination					
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Part 6 - STATEMENT AND SIGNATURE								
A. Statement and Signature. The undersigned affirms that the information contained in this application is true and accurate to the best of his or her knowledge. Please note that someone other than the Customer may sign this Application Form.								
Name: Ted Yi	(Chinkuk )	(it		Title:	Owner			
Signature:	Signature:							
Organization: Y	CH Enterprise Co	rporation						
Mailing address	600 128+	h Ave NZ						
City: Bellevue			State:	WA		Zip code:	98005	
Phone: 206-412	2-8562	Fax:			E-mail:	yiland@cor	ncast.net	
B. Affiliation.								
What is the sign	atory's involvemer	nt at the Site? Please	e check	all that	apply.		.,	
	Customer Property Owner Consultant Attorney Other – please sp	pecify:						

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 23, 2015

Mr. Ted Yi YCH Enterprise Corporation 600 128th Avenue NE Bellevue, WA 98005

Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site:

• Site Name: Duvall Market

Property Address: 15802 Main Street Northeast, Duvall, WA 98019

Facility/Site No.: 764631
VCP Project No.: NW2972
Cleanup Site ID No.: 499

Dear Mr. Yi:

Thank you for submitting documents regarding your proposed additional characterization for the Duvall Market facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases at the Site:

• Total gasoline range petroleum hydrocarbons (TPH-G) and benzene into soil.

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial actions:

Mr. Ted Yi December 23, 2015 Page 2

- 1. Kane Environmental Inc., Response to Washington Department of Ecology Letter (September 23, 2015), October 13, 2015.
- 2. Kane Environmental Inc., Work Plan Addendum to April 2015 Phase II Environmental Assessment; July 30, 2015.
- 3. Kane Environmental Inc., Limited Phase II Environmental Site Assessment, April 7, 2015.
- 4. WT Services Company, Independent Cleanup Action, 15802 Main Street, Duvall, WA, September 24, 2002.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7235 or sending an email to: <a href="mailto:nwro\_public\_request@ecy.wa.gov">nwro\_public\_request@ecy.wa.gov</a>.

The Site is defined by the extent of contamination caused by the following releases:

TPH-G and benzene into soil.

Based on a review of supporting documentation listed above, pursuant to requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site, Ecology has determined that the proposed work may not result in complete and adequate site characterization. Additional details are provided below:

• The proposed ground water monitoring locations appear to be outside of the expected contaminated area, upgradient of the area of contamination (when considering the presumed ground water flow direction), and within the previously excavated (fill) area. Wells should be installed in native material and in areas where they will effectively characterize and delineate the contamination.

As stated in Ecology's opinion letter dated September 23, 2015, ground water samples should be collected from areas that show impacts in soil, to adequately evaluate any leaching into ground water.

- The proposed work plan should include details regarding the number of samples to be collected from each soil boring or how the sample depth will be selected. The adequacy of the sampling methods cannot be determined without this information.
- The proposed soil boring locations are not adequately located to delineate the lateral extent of the contamination to the northwest and southwest of the known impacted area.
- As requested in previous correspondence (September 23, 2015), a copy of the 2008 geotechnical study report completed by HWA Geosciences for the City of Duvall has not been submitted to

Mr. Ted Yi December 23, 2015 Page 3

Ecology. Because the data is referenced in the report and used as supporting information for Site characterization, the complete report including the laboratory analysis package must be submitted.

• Under Washington State law (Chapters18.43 and18.220 RCW), all hydrogeological and engineering work must be conducted by, or under the supervision of a licensed geologist, hydrogeologist or professional engineer qualified to conduct the work. Any site investigation/cleanup document containing geologic or engineering work must be submitted under the seal of such an appropriately licensed professional. Please ensure that any documents including work plans are signed and stamped by a licensed professional.

This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action. To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7058 or by email at tamara.cardona-marek@ecy.wa.gov.

Sincerely,

Tamara Cardona, PhD Toxics Cleanup Program

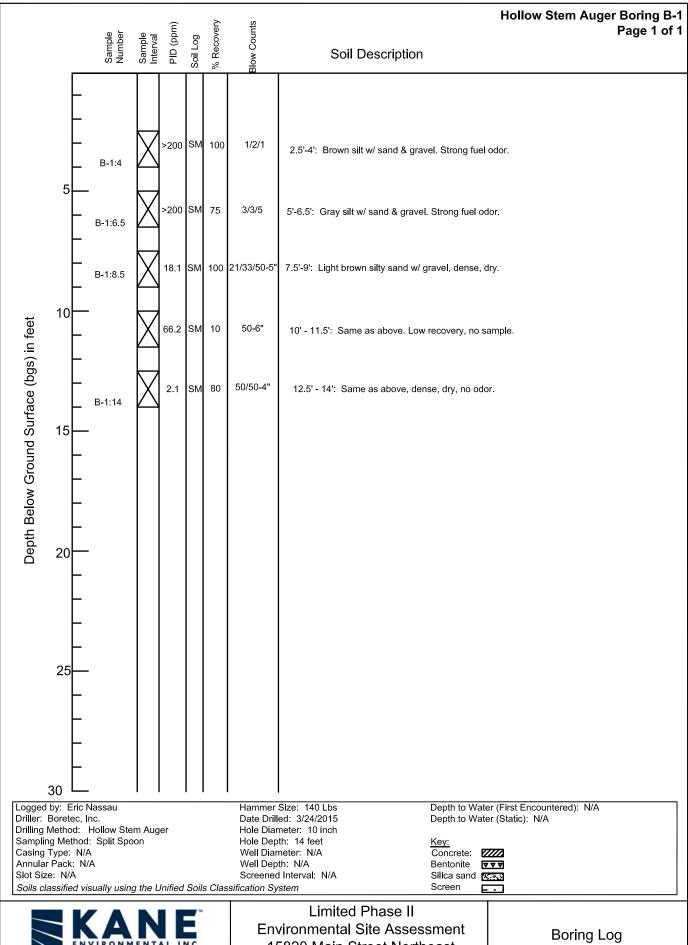
I Coacana

Enclosures: Site Description and Diagrams

cc: David Rankin, Kane Environmental, Inc.

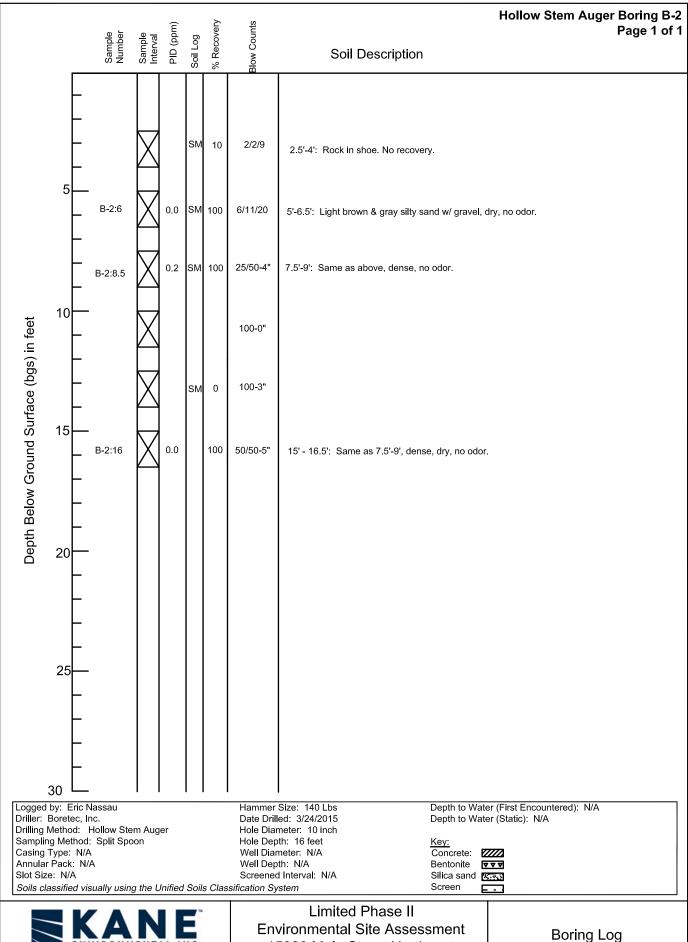
Sonia Fernandez, Ecology

ATTACHMENT F
BORING AND WELL LOGS



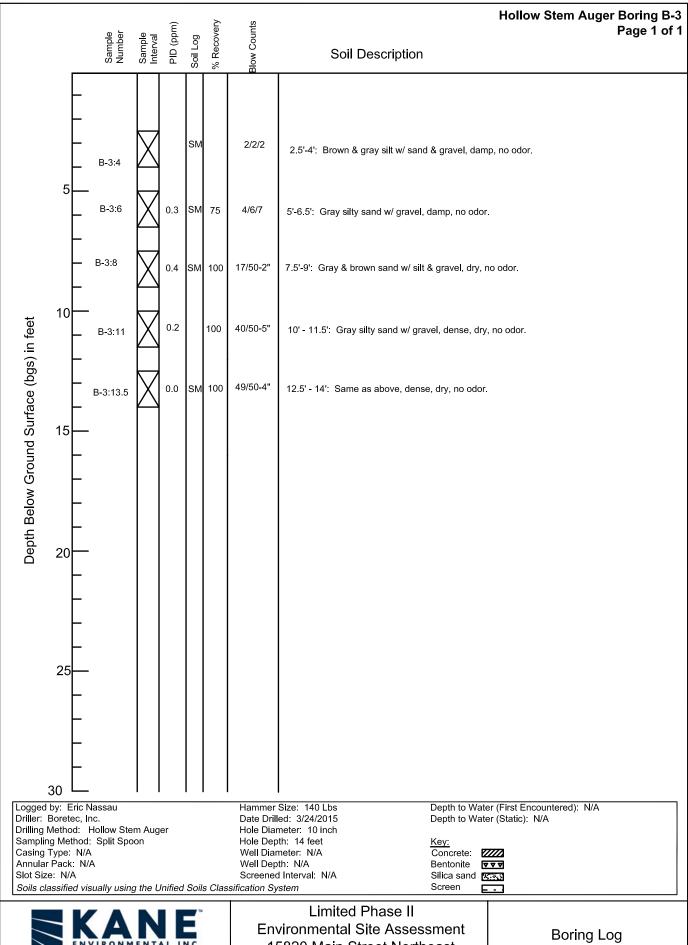


15820 Main Street Northeast Duvall, Washington



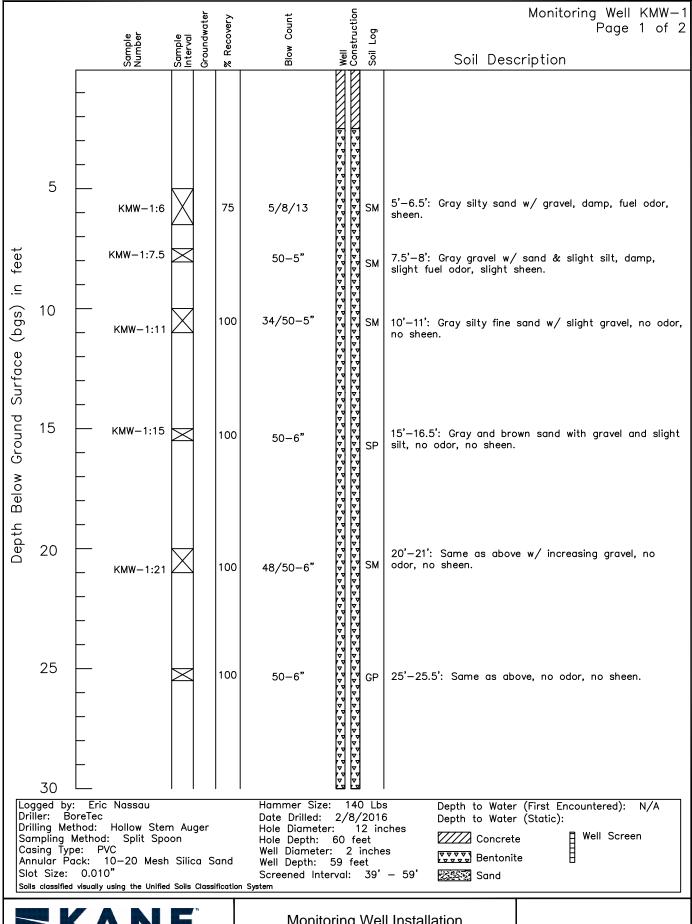


15820 Main Street Northeast Duvall, Washington





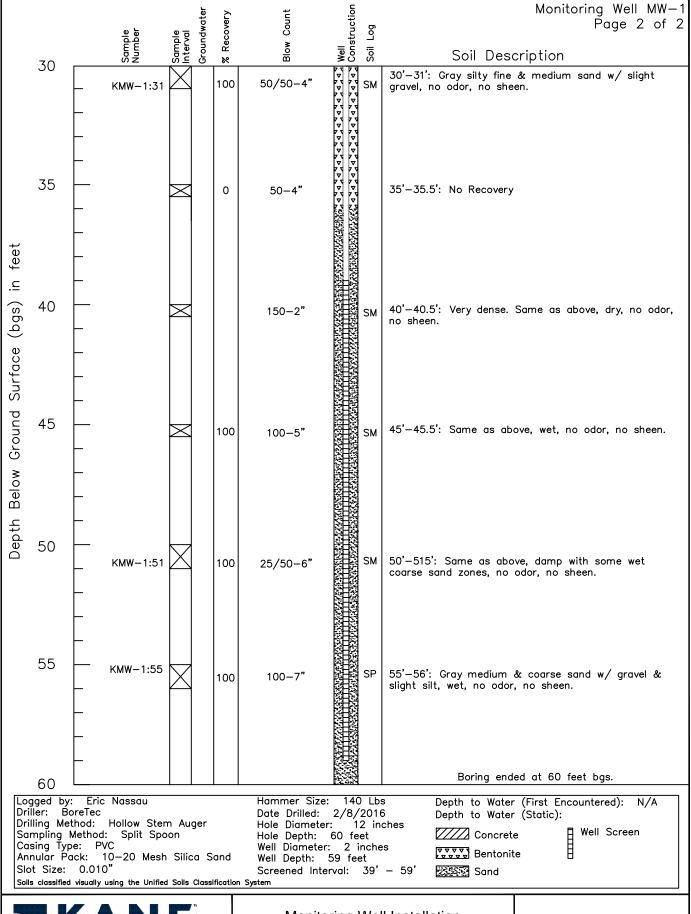
15820 Main Street Northeast Duvall, Washington





Monitoring Well Installation 15820 Main Street Northeast Duvall, Washington

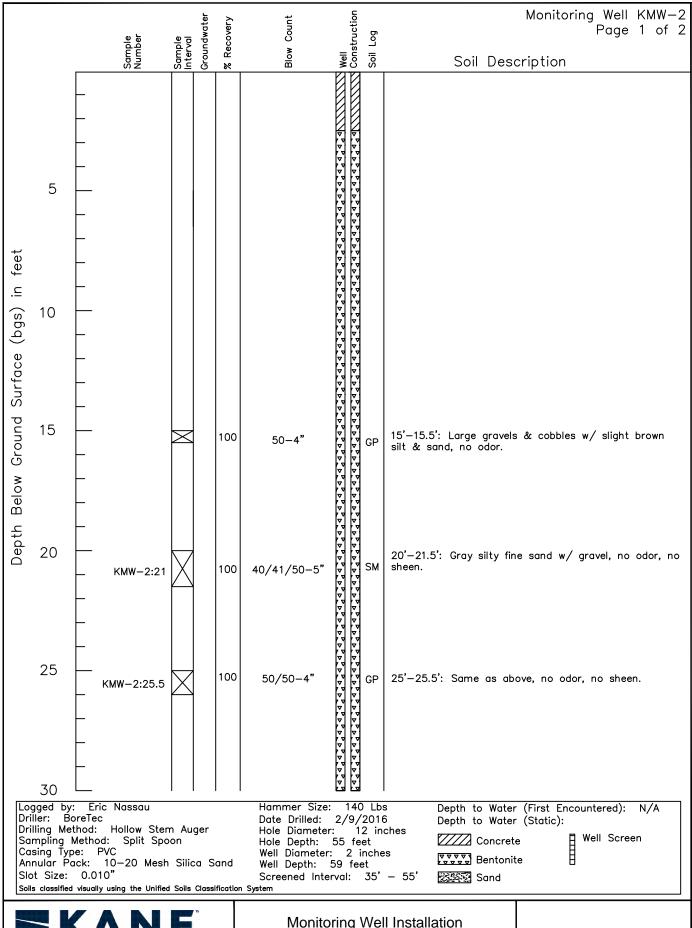
Well Construction Log



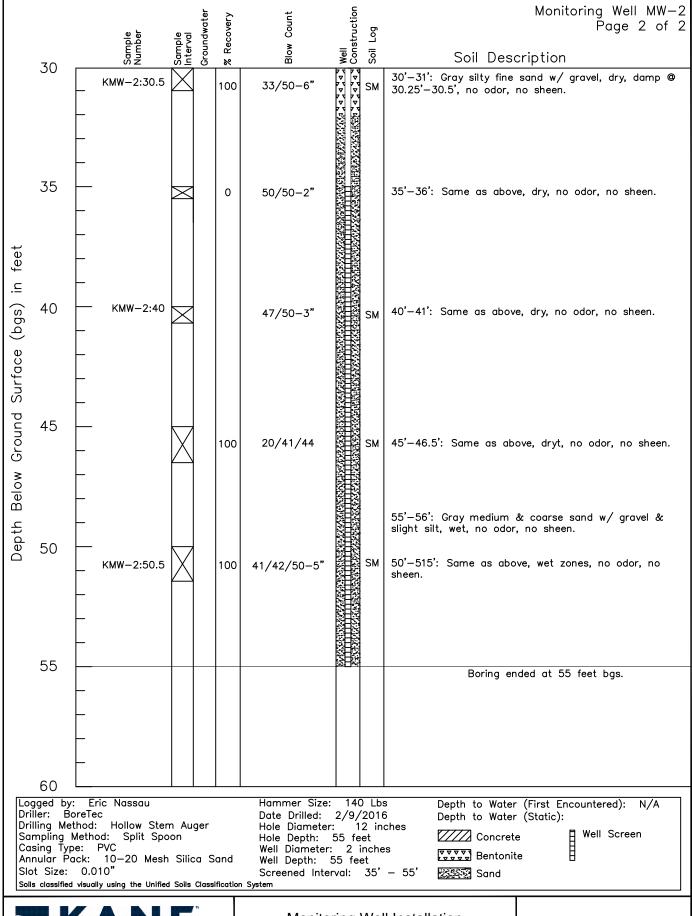


Monitoring Well Installation 15820 Main Street Northeast Duvall, Washington

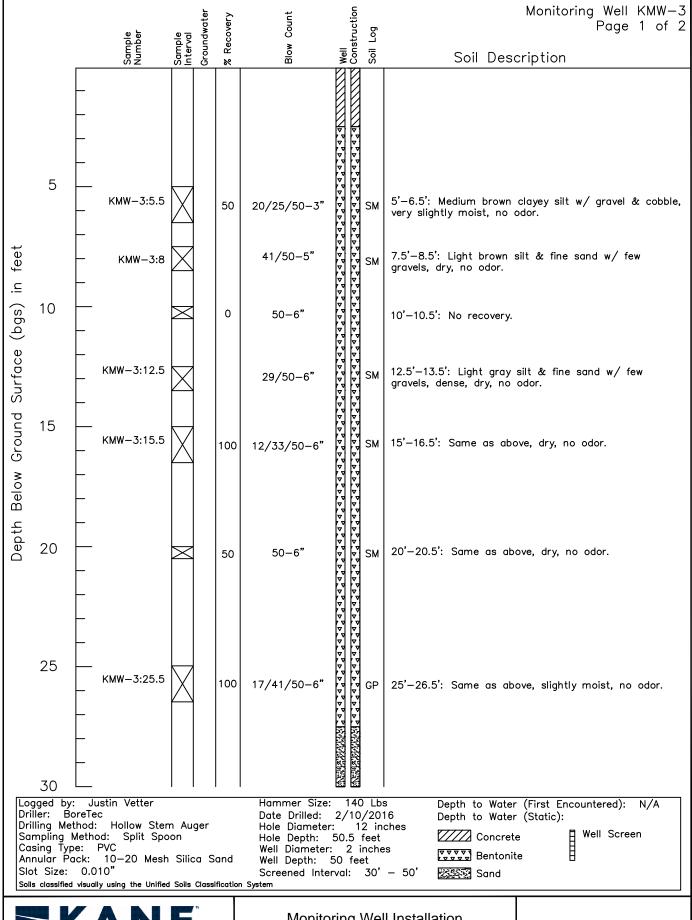
Well Construction Log



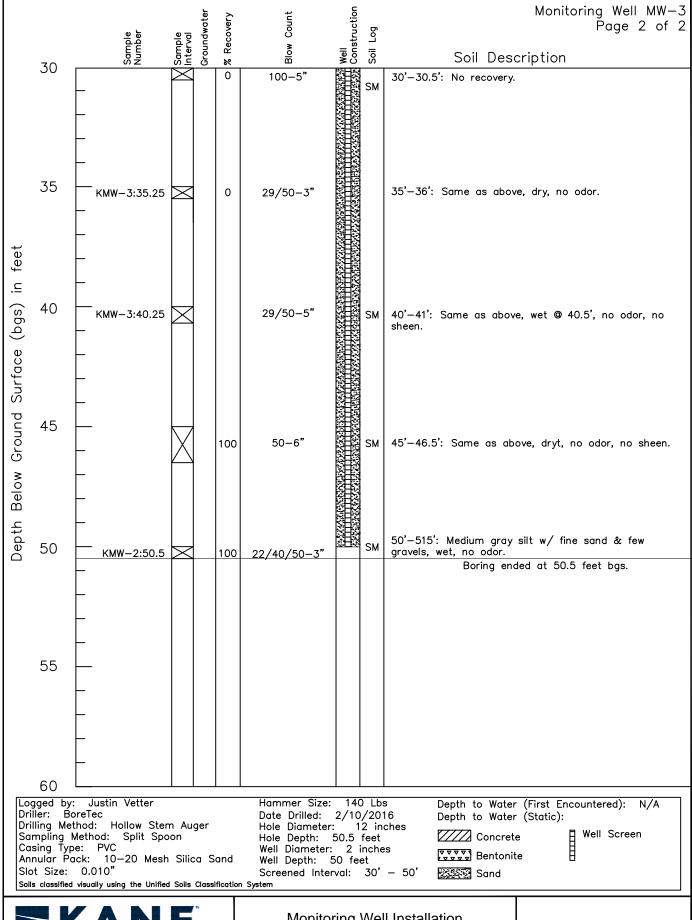














Monitoring Well Installation 15820 Main Street Northeast Duvall, Washington

Well Construction Log

ATTACHMENT G LABORATORY ANALYTICAL REPORTS



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Kane Environmental, Inc.

Eric Nassau 3815 Woodland Park Ave N, Ste. 102 Seattle, WA 98103

RE: Duvall Market - 67802

Lab ID: 1503267

March 31, 2015

#### **Attention Eric Nassau:**

Fremont Analytical, Inc. received 12 sample(s) on 3/24/2015 for the analyses presented in the following report.

Gasoline by NWTPH-Gx Sample Moisture (Percent Moisture) Total Metals by EPA Method 6020 Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward Project Manager

Date: 03/31/2015



CLIENT: Kane Environmental, Inc. Work Order Sample Summary

Project: Duvall Market - 67802

**Lab Order:** 1503267

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1503267-001	B-1:4	03/24/2015 8:30 AM	03/24/2015 2:52 PM
1503267-002	B-1:6.5	03/24/2015 8:45 AM	03/24/2015 2:52 PM
1503267-003	B-1:8.5	03/24/2015 9:00 AM	03/24/2015 2:52 PM
1503267-004	B-1:13	03/24/2015 9:15 AM	03/24/2015 2:52 PM
1503267-005	B-3:4	03/24/2015 9:50 AM	03/24/2015 2:52 PM
1503267-006	B-3:6	03/24/2015 10:00 AM	03/24/2015 2:52 PM
1503267-007	B-3:8	03/24/2015 10:15 AM	03/24/2015 2:52 PM
1503267-008	B-3:11	03/24/2015 10:30 AM	03/24/2015 2:52 PM
1503267-009	B-3:13.5	03/24/2015 10:40 AM	03/24/2015 2:52 PM
1503267-010	B-2:6	03/24/2015 11:30 AM	03/24/2015 2:52 PM
1503267-011	B-2:8.5	03/24/2015 12:05 PM	03/24/2015 2:52 PM
1503267-012	B-2:16	03/24/2015 1:15 PM	03/24/2015 2:52 PM



### **Case Narrative**

WO#: **1503267**Date: **3/31/2015** 

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

#### I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

#### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

#### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



### **Qualifiers & Acronyms**

WO#: **1503267** 

Date Reported: 3/31/2015

### Qualifiers:

- \* Flagged value is not within established control limits
- B Analyte detected in the associated Method Blank
- D Dilution was required
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- I Analyte with an internal standard that does not meet established acceptance criteria
- J Analyte detected below LOQ
- N Tentatively Identified Compound (TIC)
- Q Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S Spike recovery outside accepted recovery limits
- ND Not detected at the Reporting Limit

### Acronyms:

%Rec - Percent Recovery

**CCB - Continued Calibration Blank** 

CCV - Continued Calibration Verification

DF - Dilution Factor

**HEM** - Hexane Extractable Material

ICV - Initial Calibration Verification

LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate

MB or MBLANK - Method Blank

MDL - Method Detection Limit

MS/MSD - Matrix Spike / Matrix Spike Duplicate

PDS - Post Digestion Spike

Ref Val - Reference Value

RL - Reporting Limit

RPD - Relative Percent Difference

SD - Serial Dilution

SGT - Silica Gel Treatment

SPK - Spike

Surr - Surrogate



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 8:30:00 AM

Project: Duvall Market - 67802

Percent Moisture

**Lab ID:** 1503267-001 **Matrix:** Soil

Client Sample ID: B-1:4 Analyses	Result	RL	Qual	Units	DF	: D:	ate Analyzed
yooo	rtooun	11.5	Quai	O i iii c			410 7 11 14 1 <b>2</b> 0 4
Gasoline by NWTPH-Gx				Batch	ı ID:	10371	Analyst: BC
Gasoline	ND	3.69		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
Gasoline Range Organics C6-C12	758	184	D	mg/Kg-dry	50	3/26	6/2015 12:05:00 PM
Surr: 4-Bromofluorobenzene	111	65-135	D	%REC	50	3/26	6/2015 12:05:00 PM
Surr: Toluene-d8	121	65-135		%REC	1	3/25	5/2015 1:59:00 PM
NOTES:							
GRO - Indicates the presence of unresolve	ed compounds e	luting from tolu	ene to dod	ecane (~C7->	C12).		
Volatile Organic Compounds by E	EPA Method	<u>8260</u>		Batch	ı ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0369		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
1,2-Dichloroethane (EDC)	ND	0.0221		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
Benzene	ND	0.0148		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
Toluene	ND	0.0148		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
1,2-Dibromoethane (EDB)	ND	0.00369		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
Ethylbenzene	ND	0.0221		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
m,p-Xylene	ND	0.0148		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
o-Xylene	ND	0.0148		mg/Kg-dry	1	3/25	5/2015 1:59:00 PM
Surr: Dibromofluoromethane	93.5	63.7-129		%REC	1	3/25	5/2015 1:59:00 PM
Surr: Toluene-d8	129	64.3-131		%REC	1	3/25	5/2015 1:59:00 PM
Surr: 1-Bromo-4-fluorobenzene	120	63.1-141		%REC	1	3/25	5/2015 1:59:00 PM
Total Metals by EPA Method 6020				Batch	ı ID:	10380	Analyst: TN
Lead	6.51	0.205		mg/Kg-dry	1	3/25	5/2015 5:17:00 PM
Sample Moisture (Percent Moistu	re)			Batch	ı ID:	R21447	Analyst: CG

wt%

1

3/25/2015 10:35:49 AM

19.9



WO#: 1503267

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 8:45:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1503267-002 Matrix: Soil

Client Sample ID: B-1:6.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch	ID: 10	371 Analyst: BC
Gasoline	ND	2.24		mg/Kg-dry	1	3/25/2015 2:57:00 PM
Gasoline Range Organics C6-C12	186	112	D	mg/Kg-dry	50	3/26/2015 12:34:00 PM
Surr: 4-Bromofluorobenzene	135	65-135		%REC	1	3/25/2015 2:57:00 PM
Surr: Toluene-d8	125	65-135		%REC	1	3/25/2015 2:57:00 PM
NOTES:						

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).

/olatile Organic Compounds by EPA Method 8260			Batch	ID:	10371	Analyst: BC	
Methyl tert-butyl ether (MTBE)	ND	0.0224		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
1,2-Dichloroethane (EDC)	ND	0.0134		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
Benzene	ND	0.00896		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
Toluene	ND	0.00896		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
1,2-Dibromoethane (EDB)	ND	0.00224		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
Ethylbenzene	ND	0.0134		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
m,p-Xylene	ND	0.00896		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
o-Xylene	ND	0.00896		mg/Kg-dry	1	3/25/201	15 2:57:00 PM
Surr: Dibromofluoromethane	94.6	63.7-129		%REC	1	3/25/201	15 2:57:00 PM
Surr: Toluene-d8	133	64.3-131	S	%REC	1	3/25/201	15 2:57:00 PM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	3/25/201	15 2:57:00 PM

S - High surrogate recovery attributed to TPH interference. The method is in control as indicated by the Method Blank (MB) & Laboratory Control Sample (LCS).

Total Metals by EPA Method 6020			Batch ID	: 10380	Analyst: TN
Lead	2.96	0.186	mg/Kg-dry	3/25	5/2015 5:20:31 PM
Sample Moisture (Percent Moisture	)		Batch ID	: R21447	Analyst: CG
Percent Moisture	16.6		wt% 1	3/25	5/2015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 9:15:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1503267-004 **Matrix:** Soil

Client Sample ID: B-1:13

Analyses	Result	RL	Qual	Units DF		Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	2.12		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
Surr: 4-Bromofluorobenzene	114	65-135		%REC	1	3/25	/2015 10:35:00 AM
Surr: Toluene-d8	97.2	65-135		%REC	1	3/25	/2015 10:35:00 AM
Volatile Organic Compounds by EPA Method 8260		<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0212		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
1,2-Dichloroethane (EDC)	ND	0.0127		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
Benzene	ND	0.00849		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
Toluene	ND	0.00849		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
1,2-Dibromoethane (EDB)	ND	0.00212		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
Ethylbenzene	ND	0.0127		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
m,p-Xylene	ND	0.00849		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
o-Xylene	ND	0.00849		mg/Kg-dry	1	3/25	/2015 10:35:00 AM
Surr: Dibromofluoromethane	93.3	63.7-129		%REC	1	3/25	/2015 10:35:00 AM
Surr: Toluene-d8	96.9	64.3-131		%REC	1	3/25	/2015 10:35:00 AM
Surr: 1-Bromo-4-fluorobenzene	105	63.1-141		%REC	1	3/25	/2015 10:35:00 AM
Total Metals by EPA Method 602	<u>0</u>			Batch	ID:	10380	Analyst: TN
Lead	1.90	0.177		mg/Kg-dry	1	3/25	/2015 5:31:10 PM
Sample Moisture (Percent Moistu	<u>ure)</u>			Batch	ID:	R21447	Analyst: CG
Percent Moisture	8.20			wt%	1	3/25	/2015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

Collection Date: 3/24/2015 9:50:00 AM Client: Kane Environmental, Inc.

Project: Duvall Market - 67802

**Lab ID:** 1503267-005 Matrix: Soil

Percent Moisture

Client Sample ID: B-3:4							
Analyses	Result	RL	Qual	Units	DF	: 1	Date Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	4.56		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Gasoline Range Organics C6-C12	10.9	4.56		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Surr: 4-Bromofluorobenzene	118	65-135		%REC	1	3/	25/2015 11:04:00 AM
Surr: Toluene-d8	103	65-135		%REC	1	3/	25/2015 11:04:00 AM
NOTES:							
GRO - Indicates the presence of unresolved	compounds e	luting from tolu	ene to dod	ecane (~C7->	C12)		
Volatile Organic Compounds by EP	A Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0456		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
1,2-Dichloroethane (EDC)	ND	0.0274		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Benzene	ND	0.0183		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Toluene	ND	0.0183		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
1,2-Dibromoethane (EDB)	ND	0.00456		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Ethylbenzene	ND	0.0274		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
m,p-Xylene	ND	0.0183		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
o-Xylene	ND	0.0183		mg/Kg-dry	1	3/	25/2015 11:04:00 AM
Surr: Dibromofluoromethane	95.3	63.7-129		%REC	1	3/	25/2015 11:04:00 AM
Surr: Toluene-d8	99.9	64.3-131		%REC	1	3/	25/2015 11:04:00 AM
Surr: 1-Bromo-4-fluorobenzene	108	63.1-141		%REC	1	3/	25/2015 11:04:00 AM
Total Metals by EPA Method 6020				Batch	ID:	10380	Analyst: TN
Lead	10.8	0.197		mg/Kg-dry	1	3/	25/2015 5:34:41 PM
Sample Moisture (Percent Moisture)	)			Batch	ID:	R21447	Analyst: CG

wt%

1

3/25/2015 10:35:49 AM

25.0



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 10:15:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1503267-007 **Matrix:** Soil

Client Sample ID: B-3:8

Analyses	Result	RL	Qual	Units	DF	= [	Date Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	2.59		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
Surr: 4-Bromofluorobenzene	116	65-135		%REC	1	3/2	25/2015 11:33:00 AM
Surr: Toluene-d8	102	65-135		%REC	1	3/2	25/2015 11:33:00 AM
Volatile Organic Compounds by EP	A Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0259		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
1,2-Dichloroethane (EDC)	ND	0.0155		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
Benzene	ND	0.0104		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
Toluene	ND	0.0104		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
1,2-Dibromoethane (EDB)	ND	0.00259		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
Ethylbenzene	ND	0.0155		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
m,p-Xylene	ND	0.0104		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
o-Xylene	ND	0.0104		mg/Kg-dry	1	3/2	25/2015 11:33:00 AM
Surr: Dibromofluoromethane	91.8	63.7-129		%REC	1	3/2	25/2015 11:33:00 AM
Surr: Toluene-d8	101	64.3-131		%REC	1	3/2	25/2015 11:33:00 AM
Surr: 1-Bromo-4-fluorobenzene	108	63.1-141		%REC	1	3/2	25/2015 11:33:00 AM
Total Metals by EPA Method 6020				Batch	ID:	10380	Analyst: TN
Lead	2.25	0.180		mg/Kg-dry	1	3/2	25/2015 5:38:13 PM
Sample Moisture (Percent Moisture	)			Batch	ID:	R21447	Analyst: CG
Percent Moisture	10.3			wt%	1	3/2	25/2015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 10:40:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1503267-009 **Matrix:** Soil

Client Sample ID: B-3:13.5

Analyses	Result	RL	Qual	Units D		- D	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	1.73		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
Surr: 4-Bromofluorobenzene	110	65-135		%REC	1	3/25	5/2015 12:02:00 PM
Surr: Toluene-d8	92.8	65-135		%REC	1	3/25	5/2015 12:02:00 PM
Volatile Organic Compounds by E	EPA Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0173		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
1,2-Dichloroethane (EDC)	ND	0.0104		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
Benzene	ND	0.00692		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
Toluene	ND	0.00692		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
1,2-Dibromoethane (EDB)	ND	0.00173		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
Ethylbenzene	ND	0.0104		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
m,p-Xylene	ND	0.00692		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
o-Xylene	ND	0.00692		mg/Kg-dry	1	3/25	5/2015 12:02:00 PM
Surr: Dibromofluoromethane	94.6	63.7-129		%REC	1	3/25	5/2015 12:02:00 PM
Surr: Toluene-d8	101	64.3-131		%REC	1	3/25	5/2015 12:02:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	3/25	5/2015 12:02:00 PM
Total Metals by EPA Method 6020	!			Batch	ID:	10380	Analyst: TN
Lead	2.01	0.177		mg/Kg-dry	1	3/25	5/2015 5:41:45 PM
Sample Moisture (Percent Moistu	<u>re)</u>			Batch	ID:	R21447	Analyst: CG
Percent Moisture	7.98			wt%	1	3/25	5/2015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 11:30:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1503267-010 **Matrix:** Soil

Client Sample ID: B-2:6

Analyses	Result	RL	Qual	Units	DF	=	Date Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	1.96		mg/Kg-dry	1	3.	/25/2015 12:31:00 PM
Surr: 4-Bromofluorobenzene	115	65-135		%REC	1	3	/25/2015 12:31:00 PM
Surr: Toluene-d8	103	65-135		%REC	1	3.	/25/2015 12:31:00 PM
Volatile Organic Compounds by EP	A Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0196		mg/Kg-dry	1	3.	/25/2015 12:31:00 PM
1,2-Dichloroethane (EDC)	ND	0.0118		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
Benzene	ND	0.00785		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
Toluene	ND	0.00785		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
1,2-Dibromoethane (EDB)	ND	0.00196		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
Ethylbenzene	ND	0.0118		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
m,p-Xylene	ND	0.00785		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
o-Xylene	ND	0.00785		mg/Kg-dry	1	3,	/25/2015 12:31:00 PM
Surr: Dibromofluoromethane	93.9	63.7-129		%REC	1	3,	/25/2015 12:31:00 PM
Surr: Toluene-d8	101	64.3-131		%REC	1	3,	/25/2015 12:31:00 PM
Surr: 1-Bromo-4-fluorobenzene	107	63.1-141		%REC	1	3.	/25/2015 12:31:00 PM
Total Metals by EPA Method 6020				Batch	ID:	10380	Analyst: TN
Lead	2.28	0.166		mg/Kg-dry	1	3.	/25/2015 5:45:17 PM
Sample Moisture (Percent Moisture	)			Batch	ID:	R21447	7 Analyst: CG
Percent Moisture	10.0			wt%	1	3.	/25/2015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

Client: Kane Environmental, Inc. Collection Date: 3/24/2015 12:05:00 PM

Project: Duvall Market - 67802

**Lab ID:** 1503267-011 **Matrix:** Soil

Client Sample ID: B-2:8.5

Analyses	Result	RL	Qual	Units D		Date	e Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	2.05		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
Surr: 4-Bromofluorobenzene	109	65-135		%REC	1	3/25/20	015 1:00:00 PM
Surr: Toluene-d8	97.5	65-135		%REC	1	3/25/20	015 1:00:00 PM
Volatile Organic Compounds by EF	PA Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0205		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
1,2-Dichloroethane (EDC)	ND	0.0123		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
Benzene	ND	0.00822		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
Toluene	ND	0.00822		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
1,2-Dibromoethane (EDB)	ND	0.00205		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
Ethylbenzene	ND	0.0123		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
m,p-Xylene	ND	0.00822		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
o-Xylene	ND	0.00822		mg/Kg-dry	1	3/25/20	015 1:00:00 PM
Surr: Dibromofluoromethane	94.4	63.7-129		%REC	1	3/25/20	015 1:00:00 PM
Surr: Toluene-d8	107	64.3-131		%REC	1	3/25/20	015 1:00:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	3/25/20	015 1:00:00 PM
Total Metals by EPA Method 6020				Batch	ID:	10380	Analyst: TN
Lead	2.07	0.158		mg/Kg-dry	1	3/25/20	015 5:48:49 PM
Sample Moisture (Percent Moisture	<u>e)</u>			Batch	ID:	R21447	Analyst: CG
Percent Moisture	6.46			wt%	1	3/25/20	015 10:35:49 AM



WO#: **1503267** 

Date Reported: 3/31/2015

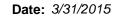
Client: Kane Environmental, Inc. Collection Date: 3/24/2015 1:15:00 PM

Project: Duvall Market - 67802

**Lab ID:** 1503267-012 **Matrix:** Soil

Client Sample ID: B-2:16

Analyses	Result	RL	Qual	l Units D		Dat	e Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	10371	Analyst: BC
Gasoline	ND	1.75		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
Surr: 4-Bromofluorobenzene	113	65-135		%REC	1	3/25/2	015 1:29:00 PM
Surr: Toluene-d8	99.3	65-135		%REC	1	3/25/2	015 1:29:00 PM
Volatile Organic Compounds by EF	PA Method	<u>8260</u>		Batch	ID:	10371	Analyst: BC
Methyl tert-butyl ether (MTBE)	ND	0.0175		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
1,2-Dichloroethane (EDC)	ND	0.0105		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
Benzene	ND	0.00701		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
Toluene	ND	0.00701		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
1,2-Dibromoethane (EDB)	ND	0.00175		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
Ethylbenzene	ND	0.0105		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
m,p-Xylene	ND	0.00701		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
o-Xylene	ND	0.00701		mg/Kg-dry	1	3/25/2	015 1:29:00 PM
Surr: Dibromofluoromethane	93.9	63.7-129		%REC	1	3/25/2	015 1:29:00 PM
Surr: Toluene-d8	100	64.3-131		%REC	1	3/25/2	015 1:29:00 PM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	3/25/2	015 1:29:00 PM
Total Metals by EPA Method 6020				Batch	ID:	10380	Analyst: TN
Lead	2.27	0.175		mg/Kg-dry	1	3/25/2	015 5:52:20 PM
Sample Moisture (Percent Moisture	<u>e)</u>			Batch	ID:	R21447	Analyst: CG
Percent Moisture	7.92			wt%	1	3/25/2	015 10:35:49 AM





### **QC SUMMARY REPORT**

#### CLIENT: Kane Environmental, Inc.

	vironmentai, inc. arket - 67802							Total Me	tals by EP	A Metho	d 6020
Sample ID MB-10380	SampType: <b>MBLK</b>			Units: mg/Kg		Prep Date:	3/25/20	15	RunNo: 21	164	
Client ID: MBLKS	Batch ID: 10380					Analysis Date:	3/25/20	15	SeqNo: 40	7332	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.200									
Sample ID LCS-10380	SampType: LCS			Units: mg/Kg		Prep Date:	3/25/20	15	RunNo: 21	<b>164</b>	
Client ID: LCSS	Batch ID: 10380					Analysis Date:	3/25/20	15	SeqNo: 40	7333	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	132	0.200	138.0	0	95.6	73.2	127.5				
Sample ID 1503089-022ADUF	SampType: <b>DUP</b>			Units: mg/Kg-	dry	Prep Date:	3/25/20	15	RunNo: 21	164	
Client ID: BATCH	Batch ID: 10380					Analysis Date:	3/25/20	15	SeqNo: 40	7335	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	4.58	0.175						4.491	1.94	20	
Sample ID <b>1503089-022AMS</b>	SampType: MS			Units: mg/Kg-	dry	Prep Date:	3/25/20	15	RunNo: 21	<b>164</b>	
Client ID: BATCH	Batch ID: 10380					Analysis Date:	3/25/20	15	SeqNo: 40	7337	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	23.6	0.173	21.67	4.491	88.0	75	125				
Sample ID <b>1503089-022AMS</b> E	SampType: MSD			Units: mg/Kg-	dry	Prep Date:	3/25/20	15	RunNo: 21	164	
Client ID: BATCH	Batch ID: 10380					Analysis Date:	3/25/20	15	SeqNo: 40	7338	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	23.9	0.175	21.84	4.491	88.9	75	125	23.57	1.39	20	

Date: 3/31/2015



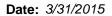
**Work Order:** 1503267

### **QC SUMMARY REPORT**

CLIENT: Kane Environmental, Inc.

**Gasoline by NWTPH-Gx** 

Project: Duvall Mark	cet - 67802								Gasoline	by NWT	PH-G
Sample ID 1503234-001BDUP	SampType: <b>DUP</b>			Units: mg/Kg	g-dry	Prep Date	e: <b>3/24/20</b>	15	RunNo: 21	473	
Client ID: BATCH	Batch ID: 10371					Analysis Date	e: <b>3/25/20</b>	15	SeqNo: 40	7451	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.54						0		30	
Surr: Toluene-d8	1.33		1.386		96.2	65	135		0		
Surr: 4-Bromofluorobenzene	1.53		1.386		110	65	135		0		
Sample ID LCS-10371	SampType: <b>LCS</b>			Units: mg/Kg		Prep Date	e: <b>3/24/20</b>	15	RunNo: 21	473	
Client ID: LCSS	Batch ID: 10371					Analysis Date	e: <b>3/24/20</b>	15	SeqNo: 40	7464	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	25.1	5.00	25.00	0	100	65	135				
Surr: Toluene-d8	1.21		1.250		96.7	65	135				
Surr: 4-Bromofluorobenzene	1.33		1.250		107	65	135				
Sample ID MB-10371	SampType: MBLK			Units: mg/Kg	]	Prep Date	e: <b>3/24/20</b>	15	RunNo: 21	473	
Client ID: MBLKS	Batch ID: 10371					Analysis Date	e: <b>3/24/20</b>	15	SeqNo: 40	7465	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.06		1.250		85.1	65	135				
Surr: 4-Bromofluorobenzene	1.30		1.250		104	65	135				
Sample ID CCV-D-10371	SampType: <b>CCV</b>			Units: mg/Kg		Prep Date	e: <b>3/26/20</b>	15	RunNo: 21	473	
Client ID: CCV	Batch ID: 10371					Analysis Date	e: <b>3/26/20</b>	15	SeqNo: 40	7536	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	489	5.00	500.0	0	97.7	80	120				
Surr: Toluene-d8	23.3		25.00		93.2	65	135				
Surr: 4-Bromofluorobenzene	27.7		25.00		111	65	135				





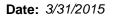
### **QC SUMMARY REPORT**

# CLIENT: Kane Environmental, Inc. Project: Duvall Market - 67802

### **Volatile Organic Compounds by EPA Method 8260**

Sample ID 1503234-001BDUP	SampType: <b>DUP</b>			Units: mg	/Kg-dry	Prep Da	ie: <b>3/24/2</b> 0	)15	RunNo: <b>21</b> 4	472	
Client ID: BATCH	Batch ID: 10371					Analysis Da	te: <b>3/25/2</b> 0	)15	SeqNo: 407	7427	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.0554						0		30	
1,2-Dichloroethane (EDC)	ND	0.0333						0		30	
Benzene	ND	0.0222						0		30	
Toluene	ND	0.0222						0		30	
1,2-Dibromoethane (EDB)	ND	0.00554						0		30	
Ethylbenzene	ND	0.0333						0		30	
m,p-Xylene	ND	0.0222						0		30	
o-Xylene	ND	0.0222						0		30	
Surr: Dibromofluoromethane	1.32		1.386		95.1	63.7	129		0		
Surr: Toluene-d8	1.37		1.386		98.7	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	1.41		1.386		102	63.1	141		0		

Sample ID 1503089-009BMS	SampType: MS			Units: mg/	Kg-dry	Prep Da	te: <b>3/24/2</b> (	)15	RunNo: <b>21</b> 4	172	
Client ID: BATCH	Batch ID: 10371					Analysis Da	te: <b>3/24/2</b> 0	)15	SeqNo: 407	7443	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.03	0.0518	1.035	0	99.6	54.4	132				
1,2-Dichloroethane (EDC)	0.919	0.0311	1.035	0	88.8	51.3	139				
Benzene	1.03	0.0207	1.035	0	99.5	63.5	133				
Toluene	0.994	0.0207	1.035	0.007794	95.3	63.4	132				
1,2-Dibromoethane (EDB)	1.17	0.00518	1.035	0	113	50.4	136				
Ethylbenzene	1.07	0.0311	1.035	0.002163	103	54.5	134				
m,p-Xylene	2.08	0.0207	2.070	0.007536	100	53.1	132				
o-Xylene	1.05	0.0207	1.035	0.002432	101	53.3	139				
Surr: Dibromofluoromethane	1.35		1.294		105	63.7	129				
Surr: Toluene-d8	1.25		1.294		96.8	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.37		1.294		106	63.1	141				





Surr: Toluene-d8

Surr: 1-Bromo-4-fluorobenzene

1.28

1.20

### **QC SUMMARY REPORT**

# CLIENT: Kane Environmental, Inc. Project: Duvall Market - 67802

### **Volatile Organic Compounds by EPA Method 8260**

Project: Duvaii Mark	et - 67602							•			
Sample ID LCS-10371	SampType: LCS			Units: mg/Kg		Prep Da	te: <b>3/24/2</b> 0	015	RunNo: <b>21</b>	472	
Client ID: LCSS	Batch ID: 10371					Analysis Da	te: <b>3/24/2</b> 0	015	SeqNo: 40	7447	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.02	0.0500	1.000	0	102	59.1	138				
1,2-Dichloroethane (EDC)	0.909	0.0300	1.000	0	90.9	61.9	136				
Benzene	0.958	0.0200	1.000	0	95.8	64.3	133				
Toluene	0.936	0.0200	1.000	0	93.6	67.3	138				
1,2-Dibromoethane (EDB)	1.18	0.00500	1.000	0	118	70	130				
Ethylbenzene	0.954	0.0300	1.000	0	95.4	74	129				
m,p-Xylene	1.85	0.0200	2.000	0	92.4	79.8	128				
o-Xylene	0.933	0.0200	1.000	0	93.3	72.7	124				
Surr: Dibromofluoromethane	1.32		1.250		106	63.7	129				
Surr: Toluene-d8	1.27		1.250		102	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.26		1.250		101	63.1	141				
Sample ID MB-10371	SampType: MBLK			Units: mg/Kg		Prep Da	te: <b>3/24/2</b> 0	)15	RunNo: <b>21</b>	472	
Client ID: MBLKS	Batch ID: 10371					Analysis Da	te: <b>3/24/2</b> 0	015	SeqNo: 40	7448	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,2-Dichloroethane (EDC)	ND	0.0300									
Benzene	ND	0.0200									
Toluene	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Surr: Dibromofluoromethane	1.23		1.250		98.4	63.7	129				

103

96.0

64.3

63.1

131

141

1.250

1.250



### Sample Log-In Check List

С	lient Name:	KANE	Work Order Numb	oer: <b>1503267</b>	
L	ogged by:	Erica Silva	Date Received:	3/24/2015	2:52:00 PM
Cha	ain of Cust	od <u>v</u>			
		ustody complete?	Yes 🗸	No $\square$	Not Present
2.	How was the	sample delivered?	<u>Client</u>		
Log	ı In				
	Coolers are p	present?	Yes 🗹	No 🗌	NA 🗆
4.	Shipping con	tainer/cooler in good condition?	Yes 🗹	No $\square$	
5.	Custody seal	s intact on shipping container/cooler?	Yes	No $\square$	Not Required 🗹
6.	Was an atten	npt made to cool the samples?	Yes 🗹	No 🗌	na 🗆
7.	Were all cool	ers received at a temperature of >0°C to 10.0°C	Yes 🗹	No 🗌	NA $\square$
8.	Sample(s) in	proper container(s)?	Yes 🗹	No 🗌	
9.	Sufficient sar	mple volume for indicated test(s)?	Yes 🗹	No $\square$	
10.	Are samples	properly preserved?	Yes 🗹	No 🗌	
11.	Was preserva	ative added to bottles?	Yes	No 🗹	NA 🗌
12.	Is the headsp	pace in the VOA vials?	Yes	No 🗌	NA 🗸
13.	Did all sampl	es containers arrive in good condition(unbroken)?	Yes 🗹	No $\square$	
14.	Does paperw	ork match bottle labels?	Yes 🗹	No 🗌	
15.	Are matrices	correctly identified on Chain of Custody?	Yes 🗹	No 🗌	
16.	Is it clear wha	at analyses were requested?	Yes 🗹	No 🗌	
17.	Were all hold	ling times able to be met?	Yes 🗸	No 🗌	
Spe	ecial Handl	ing (if applicable)			
		otified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
	Person	Notified: Date			
	By Who	m: Via:	eMail Pho	one  Fax [	In Person
	Regardi	ng:			
	Client Ir	nstructions:			
19.	Additional rer	marks:			

### **Item Information**

Item #	Temp ⁰C	Condition
Cooler	0.9	Good
Sample	1.2	Good

0.1	remont			Cha	Chain of Custody Record
3600 Fremont Ave N. T.	Tel: 206-352-3790	)	1	Laboratory Project Na (internal):	1503267
Seattle, WA 98103 F	Fax: 206-352-7178	Date:	0112	Page:	3
L	Kane Environmentar	entrel	Project Name:	mark	4
Address: City, State, Zip		Tel:	Location: Collected by:	mun street	DURIL WA
Reports To (PM): Eric	Vassery	Fax:	Email:	Project No:	67802
5	P = Pro	S = Soil, SD = Sediment,	SL = Solid, W = Water, DW = D	ing Water, GW = Gro	= Waste Water
A STATE OF THE STA	Sample Sample	Sample Started			
21-8		*			
8-1:6.5	1 0845	) /		×	
B-118.5	0900				
B-1:13	21.60	×		×	
B-3; 4	0950	×		×	
8-316	iono				
B-3: 8	1015	*		×	
6-3: 11	1030	,			
B-3: 13.5	\ m40			× .	
8-2:6	d 1130	×			
Metals Analysis (Circle): MTCA-5	RCRA-8 Pri	tants TAL Individual: Ag	Al As B Ba Be Ca Cd Co	Cr Cu fe Hg K Mg Mn	MO NO NI POSTO SE SE SE SE TITIUVZA
"Anions (Circle): Nitrate 1	Nitrite Chloride Sulfate	e Bromide 0-Phosphate	ste Fluoride Nitrate+Nitrite	+Nitrite	Special Remarks:
	Return to Client Disposa	Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)	ies are retained after 30 days.)		
elinguished	Date/Time	Received	ive o	Date/Time	

TAT-> SameDay^ NextDay^ 2 Day 3 Day STD

Please coordinate with the lab in advance

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)	INS2	3-14-K		1456 × 1	1	21/22/2 21/22/2	2	N
		30 days.)	Disposal by Lab (A fee may be assessed it samples are retained after 30 days.	y Lab (A 'ee may be asse	Disposal b	Return to Client	hSphsal:	- PM
Special Remarks:		Nitrate+Nitrite	O-Phosphate Fluoride	Bromide	e Sulfate	Nitrite Chloride	***Anions (Circle): Nitrate	***Anio
MO No NI (56) Sh Se Se Se TI TI U V Zn	Fe Hg K Mg Mn Mo Na N	Be Ca Cd Co Cr Cu F	Individual: Ag Al As B Ba	TAL	Priority Pollutants	MTCA-5 RCRA-8	*Metals Analysis (Circle): MT(	**Metal
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Comments/Deoth				mple ype itrix)*	Sample	Sample Date	Sample Name	Samp
/ = Waste Water	GW =	ater, DW = Drinking Water,	SL = Solid,	ct, S = Soil, SD = Sediment,	ther, P=Pro	B =	A = A	*Matrix Codes:
スクタナツ	Project No:		Email:	×	Fax	Nessan	Reports To (PM): Evic	Repor
C C C C C C C C C C C C C C C C C C C	200		Collected by:		Tel:		City, State, Zip	City, S
0	Mar	ame:	6	Environ mentu	UNEN	ane En	<b>×</b>	Client:
\$ 2	Laboratory Project No (internal):		3/24/15	Date:	78	Tel: 206-352-3790 Fax: 206-352-7178	3600 Fremont Ave N. Seattle, WA 98103	3600 Seatt
						Lelloll		
Chain of Custody Record	Ch							4



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Kane Environmental, Inc.

Eric Nassau 3815 Woodland Park Ave N, Ste. 102 Seattle, WA 98103

RE: Duvall Market - 67802

Lab ID: 1602108

February 17, 2016

#### **Attention Eric Nassau:**

Fremont Analytical, Inc. received 22 sample(s) on 2/10/2016 for the analyses presented in the following report.

Gasoline by NWTPH-Gx Sample Moisture (Percent Moisture) Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward Project Manager

Date: 02/17/2016



CLIENT: Kane Environmental, Inc. Work Order Sample Summary

**Project:** Duvall Market - 67802

**Lab Order:** 1602108

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1602108-001	KMW-1:6	02/08/2016 9:00 AM	02/10/2016 4:18 PM
1602108-002	KMW-1:7.5	02/08/2016 9:10 AM	02/10/2016 4:18 PM
1602108-003	KMW-1:11	02/08/2016 9:20 AM	02/10/2016 4:18 PM
1602108-004	KMW-1:15	02/08/2016 9:30 AM	02/10/2016 4:18 PM
1602108-005	KMW-1:21	02/08/2016 9:55 AM	02/10/2016 4:18 PM
1602108-006	KMW-1:31	02/08/2016 10:25 AM	02/10/2016 4:18 PM
1602108-007	KMW-1:51	02/08/2016 11:45 AM	02/10/2016 4:18 PM
1602108-008	KMW-1:55	02/08/2016 12:00 PM	02/10/2016 4:18 PM
1602108-009	KMW-2:21	02/09/2016 8:45 AM	02/10/2016 4:18 PM
1602108-010	KMW-2:25.5	02/09/2016 9:00 AM	02/10/2016 4:18 PM
1602108-011	KMW-2:30.5	02/09/2016 9:25 AM	02/10/2016 4:18 PM
1602108-012	KMW-2:40	02/09/2016 10:05 AM	02/10/2016 4:18 PM
1602108-013	KMW-2:50.5	02/09/2016 10:55 AM	02/10/2016 4:18 PM
1602108-014	KMW-3:5.5	02/10/2016 8:30 AM	02/10/2016 4:18 PM
1602108-015	KMW-3:8	02/10/2016 8:45 AM	02/10/2016 4:18 PM
1602108-016	KMW-3:12.5	02/10/2016 9:00 AM	02/10/2016 4:18 PM
1602108-017	KMW-3:15.5	02/10/2016 9:09 AM	02/10/2016 4:18 PM
1602108-018	KMW-3:25.5	02/10/2016 9:45 AM	02/10/2016 4:18 PM
1602108-019	KMW-3:35.25	02/10/2016 10:20 AM	02/10/2016 4:18 PM
1602108-020	KMW-3:40.25	02/10/2016 10:40 AM	02/10/2016 4:18 PM
1602108-021	KMW-3:45.25	02/10/2016 10:55 AM	02/10/2016 4:18 PM
1602108-022	KMW-3:50.25	02/10/2016 11:17 AM	02/10/2016 4:18 PM



### **Case Narrative**

WO#: **1602108**Date: **2/17/2016** 

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

#### I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

#### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

#### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



### **Qualifiers & Acronyms**

WO#: **1602108** 

Date Reported: 2/17/2016

#### Qualifiers:

- \* Flagged value is not within established control limits
- B Analyte detected in the associated Method Blank
- D Dilution was required
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- I Analyte with an internal standard that does not meet established acceptance criteria
- J Analyte detected below Reporting Limit
- N Tentatively Identified Compound (TIC)
- Q Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S Spike recovery outside accepted recovery limits
- ND Not detected at the Reporting Limit
- R High relative percent difference observed

#### Acronyms:

%Rec - Percent Recovery

**CCB - Continued Calibration Blank** 

**CCV - Continued Calibration Verification** 

DF - Dilution Factor

**HEM** - Hexane Extractable Material

ICV - Initial Calibration Verification

LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate

MB or MBLANK - Method Blank

MDL - Method Detection Limit

MS/MSD - Matrix Spike / Matrix Spike Duplicate

PDS - Post Digestion Spike

Ref Val - Reference Value

RL - Reporting Limit

RPD - Relative Percent Difference

SD - Serial Dilution

SGT - Silica Gel Treatment

SPK - Spike

Surr - Surrogate



WO#: **1602108** 

Date Reported: 2/17/2016

2/12/2016 12:54:42 PM

Client: Kane Environmental, Inc. Collection Date: 2/8/2016 9:00:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-001 **Matrix:** Soil

Client Sample ID: KMW-1:6

Percent Moisture

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch	n ID: 12	978 Analyst: NG
Gasoline	123	24.7	D	mg/Kg-dry	10	2/15/2016 4:46:00 PM
Surr: 4-Bromofluorobenzene	21.6	65-135	S	%Rec	1	2/13/2016 11:44:00 AM
Surr: Toluene-d8	100	65-135		%Rec	1	2/13/2016 11:44:00 AM
NOTES:						

S - Outlying surrogate recovery attributed to TPH interference. The method is in control as indicated by the Method Blank (MB) &

### Laboratory Control Sample (LCS).

Volatile Organic Compounds by	LFA WIELIIOU	0200	Daton		12978	Analyst: NG
Benzene	ND	0.00988	mg/Kg-dry	1	2/13/	2016 11:44:00 AM
Toluene	ND	0.00988	mg/Kg-dry	1	2/13/	2016 11:44:00 AM
Ethylbenzene	ND	0.0148	mg/Kg-dry	1	2/13/	2016 11:44:00 AM
m,p-Xylene	ND	0.00988	mg/Kg-dry	1	2/13/	2016 11:44:00 AM
o-Xylene	ND	0.00988	mg/Kg-dry	1	2/13/	2016 11:44:00 AM
Surr: Dibromofluoromethane	92.6	56.5-129	%Rec	1	2/13/	2016 11:44:00 AM
Surr: Toluene-d8	99.6	64.3-131	%Rec	1	2/13/	2016 11:44:00 AM
Surr: 1-Bromo-4-fluorobenzene	105	63.1-141	%Rec	1	2/13/	2016 11:44:00 AM
Sample Moisture (Percent Moistu	<u>ıre)</u>		Batch	ID:	R27563	Analyst: SL

0.500

wt%

14.7



WO#: 1602108

Date Reported: 2/17/2016

Collection Date: 2/8/2016 9:10:00 AM Client: Kane Environmental, Inc.

Project: Duvall Market - 67802

**Lab ID:** 1602108-002 Matrix: Soil

Client Sample ID: KMW-1:7.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch	ID: 12	2978 Analyst: NG
Gasoline	57.1	3.80		mg/Kg-dry	1	2/13/2016 12:41:00 PM
Surr: 4-Bromofluorobenzene	4.04	65-135	S	%Rec	1	2/13/2016 12:41:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	2/13/2016 12:41:00 PM
NOTES:						

S - Outlying surrogate recovery attributed to TPH interference. The method is in control as indicated by the Method Blank (MB) & Laboratory Control Sample (LCS).

Volatile Organic Compounds by EPA	<u>Method</u>	8260	Batch	ID:	12978 Analyst: NG
Benzene	ND	0.0152	mg/Kg-dry	1	2/13/2016 12:41:00 PM
Toluene	ND	0.0152	mg/Kg-dry	1	2/13/2016 12:41:00 PM
Ethylbenzene	ND	0.0228	mg/Kg-dry	1	2/13/2016 12:41:00 PM
m,p-Xylene	ND	0.0152	mg/Kg-dry	1	2/13/2016 12:41:00 PM
o-Xylene	ND	0.0152	mg/Kg-dry	1	2/13/2016 12:41:00 PM
Surr: Dibromofluoromethane	97.0	56.5-129	%Rec	1	2/13/2016 12:41:00 PM
Surr: Toluene-d8	100	64.3-131	%Rec	1	2/13/2016 12:41:00 PM
Surr: 1-Bromo-4-fluorobenzene	105	63.1-141	%Rec	1	2/13/2016 12:41:00 PM
Sample Moisture (Percent Moisture)			Batch	ID:	R27563 Analyst: SL
Percent Moisture	11.5	0.500	wt%	1	2/12/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/8/2016 9:20:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-003 **Matrix:** Soil

Client Sample ID: KMW-1:11

Analyses	Result	RL	Qual	Units	DF	Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	2.68		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
Surr: 4-Bromofluorobenzene	101	65-135		%Rec	1	2/13	/2016 1:09:00 PM
Surr: Toluene-d8	98.2	65-135		%Rec	1	2/13	/2016 1:09:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.0107		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
Toluene	ND	0.0107		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
Ethylbenzene	ND	0.0161		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
m,p-Xylene	ND	0.0107		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
o-Xylene	ND	0.0107		mg/Kg-dry	1	2/13	/2016 1:09:00 PM
Surr: Dibromofluoromethane	101	56.5-129		%Rec	1	2/13	/2016 1:09:00 PM
Surr: Toluene-d8	101	64.3-131		%Rec	1	2/13	/2016 1:09:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.4	63.1-141		%Rec	1	2/13	/2016 1:09:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	10.3	0.500		wt%	1	2/12	/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/8/2016 12:00:00 PM

Project: Duvall Market - 67802

**Lab ID:** 1602108-008 **Matrix:** Soil

Client Sample ID: KMW-1:55

Analyses	Result	RL	Qual	Units	DF	Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	4.60		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
Surr: 4-Bromofluorobenzene	102	65-135		%Rec	1	2/13	/2016 1:38:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	2/13	/2016 1:38:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.0184		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
Toluene	ND	0.0184		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
Ethylbenzene	ND	0.0276		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
m,p-Xylene	ND	0.0184		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
o-Xylene	ND	0.0184		mg/Kg-dry	1	2/13	/2016 1:38:00 PM
Surr: Dibromofluoromethane	98.4	56.5-129		%Rec	1	2/13	/2016 1:38:00 PM
Surr: Toluene-d8	103	64.3-131		%Rec	1	2/13	/2016 1:38:00 PM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%Rec	1	2/13	/2016 1:38:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	9.57	0.500		wt%	1	2/12	/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/9/2016 8:45:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-009 **Matrix:** Soil

Client Sample ID: KMW-2:21

Analyses	Result	RL	Qual	Units	DF	Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	2.19		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
Surr: 4-Bromofluorobenzene	99.6	65-135		%Rec	1	2/13	/2016 2:06:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	2/13	/2016 2:06:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.00876		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
Toluene	ND	0.00876		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
Ethylbenzene	ND	0.0131		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
m,p-Xylene	ND	0.00876		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
o-Xylene	ND	0.00876		mg/Kg-dry	1	2/13	/2016 2:06:00 PM
Surr: Dibromofluoromethane	99.3	56.5-129		%Rec	1	2/13	/2016 2:06:00 PM
Surr: Toluene-d8	102	64.3-131		%Rec	1	2/13	/2016 2:06:00 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	63.1-141		%Rec	1	2/13	/2016 2:06:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	8.48	0.500		wt%	1	2/12	/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/9/2016 10:55:00 AM

**Project:** Duvall Market - 67802

**Lab ID:** 1602108-013 **Matrix:** Soil

Client Sample ID: KMW-2:50.5

Analyses	Result	RL	Qual	Units	DF	Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	2.37		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
Surr: 4-Bromofluorobenzene	96.4	65-135		%Rec	1	2/13	/2016 4:27:00 PM
Surr: Toluene-d8	98.5	65-135		%Rec	1	2/13	/2016 4:27:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.00949		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
Toluene	ND	0.00949		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
Ethylbenzene	ND	0.0142		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
m,p-Xylene	ND	0.00949		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
o-Xylene	ND	0.00949		mg/Kg-dry	1	2/13	/2016 4:27:00 PM
Surr: Dibromofluoromethane	98.2	56.5-129		%Rec	1	2/13	/2016 4:27:00 PM
Surr: Toluene-d8	99.0	64.3-131		%Rec	1	2/13	/2016 4:27:00 PM
Surr: 1-Bromo-4-fluorobenzene	94.7	63.1-141		%Rec	1	2/13	/2016 4:27:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	13.1	0.500		wt%	1	2/12	/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/10/2016 8:45:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-015 **Matrix:** Soil

Client Sample ID: KMW-3:8

Analyses	Result	RL	Qual	Units	DF	D	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	3.83		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
Surr: 4-Bromofluorobenzene	102	65-135		%Rec	1	2/13	/2016 4:55:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	2/13	/2016 4:55:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.0153		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
Toluene	ND	0.0153		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
Ethylbenzene	ND	0.0230		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
m,p-Xylene	ND	0.0153		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
o-Xylene	ND	0.0153		mg/Kg-dry	1	2/13	/2016 4:55:00 PM
Surr: Dibromofluoromethane	95.4	56.5-129		%Rec	1	2/13	/2016 4:55:00 PM
Surr: Toluene-d8	97.6	64.3-131		%Rec	1	2/13	/2016 4:55:00 PM
Surr: 1-Bromo-4-fluorobenzene	100	63.1-141		%Rec	1	2/13	/2016 4:55:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	8.70	0.500		wt%	1	2/12	/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/10/2016 9:00:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-016 **Matrix:** Soil

Client Sample ID: KMW-3:12.5

Analyses	Result	RL	Qual	Units	DF	D	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ı ID:	12978	Analyst: NG
Gasoline	ND	4.16		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
Surr: 4-Bromofluorobenzene	97.9	65-135		%Rec	1	2/13	3/2016 5:23:00 PM
Surr: Toluene-d8	98.3	65-135		%Rec	1	2/13	3/2016 5:23:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ı ID:	12978	Analyst: NG
Benzene	ND	0.0166		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
Toluene	ND	0.0166		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
Ethylbenzene	ND	0.0250		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
m,p-Xylene	ND	0.0166		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
o-Xylene	ND	0.0166		mg/Kg-dry	1	2/13	3/2016 5:23:00 PM
Surr: Dibromofluoromethane	98.3	56.5-129		%Rec	1	2/13	3/2016 5:23:00 PM
Surr: Toluene-d8	99.6	64.3-131		%Rec	1	2/13	3/2016 5:23:00 PM
Surr: 1-Bromo-4-fluorobenzene	96.5	63.1-141		%Rec	1	2/13	3/2016 5:23:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ı ID:	R27563	Analyst: SL
Percent Moisture	8.44	0.500		wt%	1	2/12	2/2016 12:54:42 PM



WO#: **1602108** 

Date Reported: 2/17/2016

Client: Kane Environmental, Inc. Collection Date: 2/10/2016 10:40:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602108-020 **Matrix:** Soil

Client Sample ID: KMW-3:40.25

Analyses	Result	RL	Qual	Units	DF	Da	ate Analyzed
Gasoline by NWTPH-Gx				Batch	ID:	12978	Analyst: NG
Gasoline	ND	4.30		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
Surr: 4-Bromofluorobenzene	101	65-135		%Rec	1	2/13	/2016 5:52:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	2/13	/2016 5:52:00 PM
Volatile Organic Compounds by	EPA Method	<u>8260</u>		Batch	ID:	12978	Analyst: NG
Benzene	ND	0.0172		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
Toluene	ND	0.0172		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
Ethylbenzene	ND	0.0258		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
m,p-Xylene	ND	0.0172		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
o-Xylene	ND	0.0172		mg/Kg-dry	1	2/13	/2016 5:52:00 PM
Surr: Dibromofluoromethane	98.9	56.5-129		%Rec	1	2/13	/2016 5:52:00 PM
Surr: Toluene-d8	99.1	64.3-131		%Rec	1	2/13	/2016 5:52:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.0	63.1-141		%Rec	1	2/13	/2016 5:52:00 PM
Sample Moisture (Percent Moist	ture)			Batch	ID:	R27563	Analyst: SL
Percent Moisture	8.78	0.500		wt%	1	2/12	/2016 12:54:42 PM

Date: 2/17/2016



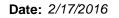
**Work Order:** 1602108

### **QC SUMMARY REPORT**

CLIENT: Kane Environmental, Inc.

Gasoline by NWTPH-Gx

cet - 67802								Gasonine	By INVI	<u> </u>
SampType: LCS			Units: mg/Kg		Prep Date	e: <b>2/11/20</b>	16	RunNo: 27	593	
Batch ID: 12978					Analysis Date	e: <b>2/13/20</b>	16	SeqNo: 520	0659	
Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
25.6	5.00	25.00	0	103	65	135				
1.24		1.250		98.9	65	135				
1.27		1.250		101	65	135				
SampType: <b>MBLK</b>			Units: mg/Kg		Prep Date	e: <b>2/11/20</b>	16	RunNo: 27	593	
Batch ID: 12978					Analysis Date	e: <b>2/13/20</b>	16	SeqNo: 520	0660	
Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ND	5.00									
1.23		1.250		98.6	65	135				
1.25		1.250		99.6	65	135				
SampType: <b>DUP</b>			Units: mg/Kg	-dry	Prep Date	e: <b>2/11/2</b> 0	16	RunNo: 27	593	
Batch ID: 12978					Analysis Date	e: <b>2/13/20</b>	16	SeqNo: 520	0643	
Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
ND	4.00						0		30	
0.985		1.001		98.4	65	135		0		
1.00		1.001		100	65	135		0		
SampType: <b>DUP</b>			Units: mg/Kg	-dry	Prep Date	e: <b>2/11/20</b>	16	RunNo: 27	593	
Batch ID: 12978					Analysis Date	e: <b>2/13/20</b>	16	SeqNo: 520	0647	
Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
204	2.47						175.1	15.1	30	
0.639		0.6175		103	65	135		0		
0.639										
	SampType: LCS Batch ID: 12978 Result  25.6 1.24 1.27  SampType: MBLK Batch ID: 12978 Result  ND 1.23 1.25  SampType: DUP Batch ID: 12978 Result  ND 0.985 1.00  SampType: DUP Batch ID: 12978 Result	SampType: LCS Batch ID: 12978 Result RL  25.6 5.00 1.24 1.27  SampType: MBLK Batch ID: 12978 Result RL  ND 5.00 1.23 1.25  SampType: DUP Batch ID: 12978 Result RL  ND 4.00 0.985 1.00  SampType: DUP Batch ID: 12978 Result RL	SampType: LCS         Batch ID:       12978         Result       RL       SPK value         25.6       5.00       25.00         1.24       1.250         1.27       1.250         SampType: MBLK         Batch ID:       12978         Result       RL       SPK value         ND       5.00         1.23       1.250         1.25       1.250         SampType: DUP         Batch ID:       12978         Result       RL       SPK value         SampType: DUP         Batch ID:       12978         Result       RL       SPK value	SampType: LCS         Units: mg/Kg           Batch ID:         12978         Result         RL         SPK value         SPK Ref Val           25.6         5.00         25.00         0           1.24         1.250         1.250           1.27         1.250         Units: mg/Kg           SampType: MBLK         Units: mg/Kg           Batch ID:         12978           Result         RL         SPK value         SPK Ref Val           SampType: DUP         Units: mg/Kg           Batch ID:         1.001         1.001           SampType: DUP         Units: mg/Kg           Batch ID:         12978           Result         RL         SPK value         SPK Ref Val	SampType: LCS         Batch ID:       12978         Result       RL       SPK value       SPK Ref Val       %REC         25.6       5.00       25.00       0       103         1.24       1.250       98.9         1.27       1.250       101         SampType: MBLK       Units: mg/Kg         Batch ID:       12978       SPK value       SPK Ref Val       %REC         ND       5.00       1.250       98.6       1.250       98.6         1.25       1.250       99.6       99.6       99.6         SampType:       DUP       Units: mg/Kg-dry         Batch ID:       12978       1.001       98.4         1.00       1.001       1.001       100         SampType: DUP       Units: mg/Kg-dry         Batch ID:       12978       Units: mg/Kg-dry         Result       RL       SPK value       SPK Ref Val       %REC	SampType: LCS         Units: mg/Kg         Prep Date Analysis Dat	SampType: LCS         Units: mg/Kg         Prep Date: 2/11/20           Batch ID:         12978         Analysis Date: 2/13/20           Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           25.6         5.00         25.00         0         103         65         135           1.24         1.250         98.9         65         135           1.27         1.250         101         65         135           SampType: MBLK         Units: mg/Kg         Prep Date: 2/11/20         2/11/20           Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           ND         5.00         1.250         98.6         65         135           1.23         1.250         98.6         65         135           1.25         1.250         99.6         65         135           SampType: DUP         Units: mg/Kg-dry         Prep Date: 2/13/20         2/13/20           Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           ND         4.00         1.001	SampType: LCS         Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val           25.6         5.00         25.00         0         103         65         135	SampType: LCS   Units: mg/Kg   Prep Date: 2/11/2016   RunNo: 275	SampType: LCS   Batch ID: 12978   Result   RL   SPK value   SPK Ref Val   SPK Ref Va





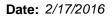
**QC SUMMARY REPORT** 

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

**Gasoline by NWTPH-Gx** 

Sample ID CCV-D-12978	SampType: CCV			Units: mg/Kg		Prep Da	te: <b>2/15/2</b> 0	016	RunNo: <b>27</b>	593	
Client ID: CCV	Batch ID: 12978					Analysis Da	te: <b>2/15/2</b> 0	016	SeqNo: 52	0966	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	539	5.00	500.0	0	108	80	120				
Surr: Toluene-d8	24.2		25.00		96.8	65	135				
Surr: 4-Bromofluorobenzene	26.5		25.00		106	65	135				



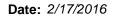


### **QC SUMMARY REPORT**

### **CLIENT:** Kane Environmental, Inc.

### **Volatile Organic Compounds by EPA Method 8260**

Project: Duvall Market	et - 67802					voiatile	Organ	ic Compou	nas by EP	A Wetho	a 8260
Sample ID LCS-12978	SampType: LCS			Units: mg/Kg		Prep Date	e: <b>2/11/2</b> 0	)16	RunNo: 27	591	
Client ID: LCSS	Batch ID: 12978					Analysis Date	e: <b>2/13/2</b> 0	)16	SeqNo: 520	0623	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.06	0.0200	1.000	0	106	64.3	133				
Toluene	0.964	0.0200	1.000	0	96.4	67.3	138				
Ethylbenzene	1.03	0.0300	1.000	0	103	74	129				
m,p-Xylene	2.18	0.0200	2.000	0	109	70	124				
o-Xylene	0.990	0.0200	1.000	0	99.0	72.7	124				
Surr: Dibromofluoromethane	1.27		1.250		102	56.5	129				
Surr: Toluene-d8	1.27		1.250		101	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.32		1.250		105	63.1	141				
Sample ID MB-12978	SampType: <b>MBLK</b>			Units: mg/Kg		Prep Date	e: <b>2/11/2</b> 0	)16	RunNo: 27	591	
Client ID: MBLKS	Batch ID: 12978					Analysis Date	e: <b>2/13/2</b> 0	)16	SeqNo: 520	0624	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0200									
Toluene	ND	0.0200									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Surr: Dibromofluoromethane	1.25		1.250		99.6	56.5	129				
Surr: Toluene-d8	1.24		1.250		99.6	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.1	63.1	141				
Sample ID 1602107-001BDUP	SampType: <b>DUP</b>			Units: mg/Kg-	dry	Prep Date	e: <b>2/11/2</b> 0	)16	RunNo: 27	591	
Client ID: BATCH	Batch ID: 12978					Analysis Date	e: <b>2/13/2</b> 0	)16	SeqNo: 520	0602	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0160						0		30	
Toluene	ND	0.0160						0		30	
Ethylbenzene	ND	0.0240						0		30	
m,p-Xylene	0.0296	0.0160						0.02603	12.9	30	



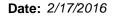


### **QC SUMMARY REPORT**

### **CLIENT:** Kane Environmental, Inc.

### **Volatile Organic Compounds by EPA Method 8260**

Surr: Dibromofluoromethane         0.950         1.001         94.9         56.5         129         0           Surr: Toluene-d8         0.991         1.001         99.0         64.3         131         0           Surr: 1-Bromo-4-fluorobenzene         0.985         1.001         98.4         63.1         141         0           Sample ID 1602108-001BDUP         SampType: DUP         Units: mg/Kg-dry         Prep Date: 2/11/2016         RunNo: 27591           Client ID: KMW-1:6         Batch ID: 12978         Analysis Date: 2/13/2016         SeqNo: 520606           Analyte         Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         ND         0.00988         0         30	J 020U	A Wetnoc	nas by EP	ic Compoui	Organi	volatile					et - 67802	ct: Duvall Marke	Project:
Analyte   Result   RL   SPK value   SPK Ref Val   WREC   LowLimit   HighLimit   RPD Ref Val   WRPD   RPDLImit   o-Xylene		j91	RunNo: <b>275</b>	116	: 2/11/20	Prep Date:	Kg-dry	Units: mg/			SampType: <b>DUP</b>	e ID 1602107-001BDUP	Sample ID
c-Xylene         ND         0.0160         John Surr: Dibromofluoromethane         0.950         1.001         94.9         56.5         129         0         30           Surr: Tofulene-d8         0.991         1.001         99.0         64.3         131         0         1           Surr: 1-Bromo-4-fluorobenzene         0.985         1.001         98.4         63.1         141         0         0           Sample ID         1602108-001BDUP         SampType: DUP         Units: mg/Kg-dry         Prep Date: 2/13/2016         RunNo: 27591         SeqNo: 520606           Analyte         Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         ND         0.00988		)602	SeqNo: <b>520</b>	116	: <b>2/13/20</b>	Analysis Date					Batch ID: 12978	D: BATCH	Client ID:
Surr: Dibromofluoromethane         0.950         1.001         94.9         56.5         129         0         1.001         99.0         64.3         131         0	Qual	RPDLimit	%RPD	RPD Ref Val	HighLimit	LowLimit H	%REC	SPK Ref Val	SPK value	RL	Result		Analyte
Surr: Toluene-d8 Surr: 1-Bromo-4-fluorobenzene         0.991 0.985         1.001 1.001         99.0 98.4         64.3 63.1         131 141         0         <		30		0						0.0160	ND	ne	o-Xylene
Surr: 1-Bromo-4-fluorobenzene         0.985         1.001         98.4         63.1         141         0         Clear ID         1602108-001BDUP         SampType: DUP         Units: mg/Kg-dry         Prep Date: Prep			0		129	56.5	94.9		1.001		0.950	: Dibromofluoromethane	Surr: Dik
Sample   D   1602108-001BDUP   SampType   DUP     Dup   Dup     Dup   Dup     Dup   Dup     Dup   D			0		131	64.3	99.0		1.001		0.991	: Toluene-d8	Surr: To
Client ID:   KMW-1:6   Batch ID:   12978			0		141	63.1	98.4		1.001		0.985	: 1-Bromo-4-fluorobenzene	Surr: 1-E
Analyte   Result   RL   SPK value   SPK Ref Val   %REC   LowLimit   HighLimit   RPD Ref Val   %RPD   RPDLimit			RunNo: <b>275</b>	116	e: <b>2/11/20</b>	Prep Date:	Kg-dry	Units: mg/			SampType: <b>DUP</b>	e ID <b>1602108-001BDUP</b>	Sample ID
Benzene		)606	SeqNo: <b>520</b>	116	: <b>2/13/20</b>	Analysis Date					Batch ID: 12978	D: <b>KMW-1:6</b>	Client ID:
Toluene	Qual	RPDLimit	%RPD	RPD Ref Val	HighLimit	LowLimit H	%REC	SPK Ref Val	SPK value	RL	Result	9	Analyte
Ethylbenzene		30		0						0.00988	ND	ne	Benzene
m,p-Xylene         ND         0.00988 o-Xylene         ND         0.00988 o-Xylene         0         30 o-Xylene         40 o-Xylene         30 o-Xylene         40 o-Xylene		30		0						0.00988	ND	е	Toluene
O-Xylene		30		0						0.0148	ND	enzene	Ethylbenze
Surr: Dibromofluoromethane         0.609         0.6175         98.6         56.5         129         0           Surr: Toluene-d8         0.644         0.6175         104         64.3         131         0           Surr: 1-Bromo-4-fluorobenzene         0.665         0.6175         108         63.1         141         0           Sample ID 1602108-020BMS         SampType: MS         Units: mg/Kg-dry         Prep Date: 2/11/2016         RunNo: 27591           Client ID: KMW-3:40.25         Batch ID: 12978         Analysis Date: 2/13/2016         SeqNo: 520615           Analyte         Result         R         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         0.704         0.0172         0.8591         0         82.0         63.5         133           Toluene         0.607         0.0172         0.8591         0         70.6         63.4         132		30		0						0.00988	ND	lene	m,p-Xylene
Surr: Toluene-d8       0.644       0.6175       104       64.3       131       0		30		0						0.00988	ND	ne	o-Xylene
Surr: 1-Bromo-4-fluorobenzene         0.665         0.6175         108         63.1         141         0           Sample ID 1602108-020BMS         SampType: MS         Units: mg/Kg-dry         Prep Date: 2/11/2016         RunNo: 27591           Client ID: KMW-3:40.25         Batch ID: 12978         Analysis Date: 2/13/2016         SeqNo: 520615           Analyte         Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         0.704         0.0172         0.8591         0         82.0         63.5         133           Toluene         0.607         0.0172         0.8591         0         70.6         63.4         132			0		129	56.5	98.6		0.6175		0.609	: Dibromofluoromethane	Surr: Dik
Sample ID 1602108-020BMS         SampType: MS         Units: mg/Kg-dry         Prep Date: 2/11/2016         RunNo: 27591           Client ID: KMW-3:40.25         Batch ID: 12978         Analysis Date: 2/13/2016         2/13/2016         SeqNo: 520615           Analyte         Result         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         0.704         0.0172         0.8591         0         82.0         63.5         133           Toluene         0.607         0.0172         0.8591         0         70.6         63.4         132			0		131	64.3	104		0.6175		0.644	: Toluene-d8	Surr: To
Client ID:         KMW-3:40.25         Batch ID:         12978         Analysis Date:         2/13/2016         SeqNo:         520615           Analyte         Result         REsult         RL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         RPD Ref Val         %RPD         RPDLimit           Benzene         0.704         0.0172         0.8591         0         82.0         63.5         133           Toluene         0.607         0.0172         0.8591         0         70.6         63.4         132			0		141	63.1	108		0.6175		0.665	: 1-Bromo-4-fluorobenzene	Surr: 1-E
Analyte Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit  Benzene 0.704 0.0172 0.8591 0 82.0 63.5 133  Toluene 0.607 0.0172 0.8591 0 70.6 63.4 132		 i91	RunNo: <b>275</b>	)16	e: 2/11/20	Prep Date:	Kg-dry	Units: mg/			SampType: <b>MS</b>	e ID <b>1602108-020BMS</b>	Sample ID
Benzene 0.704 0.0172 0.8591 0 82.0 63.5 133 Toluene 0.607 0.0172 0.8591 0 70.6 63.4 132		)615	SeqNo: 520	16	e: <b>2/13/20</b>	Analysis Date:					Batch ID: 12978	D: <b>KMW-3:40.25</b>	Client ID:
Toluene 0.607 0.0172 0.8591 0 70.6 63.4 132	Qual	RPDLimit	%RPD	RPD Ref Val	HighLimit	LowLimit H	%REC	SPK Ref Val	SPK value	RL	Result	•	Analyte
					133	63.5	82.0	0	0.8591	0.0172	0.704	ne	Benzene
					132	63.4	70.6	0	0.8591	0.0172	0.607	е	Toluene
Ethylbenzene 0.663 0.0258 0.8591 0 77.2 54.5 134					134	54.5	77.2	0	0.8591	0.0258	0.663	enzene	Ethylbenze
m,p-Xylene 1.37 0.0172 1.718 0 79.8 53.1 132					132	53.1	79.8	0	1.718	0.0172	1.37	lene	m,p-Xylene
o-Xylene 0.604 0.0172 0.8591 0 70.3 53.3 139					139	53.3	70.3	0	0.8591	0.0172	0.604	ne	o-Xylene
Surr: Dibromofluoromethane         1.08         1.074         101         56.5         129					129	56.5	101		1.074		1.08	: Dibromofluoromethane	Surr: Dib
Surr: Toluene-d8 1.11 1.074 104 64.3 131					131	64.3	104		1.074		1.11	: Toluene-d8	Surr: To
Surr: 1-Bromo-4-fluorobenzene         1.15         1.074         107         63.1         141					141	63.1	107		1.074		1.15	: 1-Bromo-4-fluorobenzene	Surr: 1-E





### **QC SUMMARY REPORT**

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

### **Volatile Organic Compounds by EPA Method 8260**

Sample ID 1602108-020BMS SampType: MS Units: mg/Kg-dry Prep Date: 2/11/2016 RunNo: 27591

Client ID: KMW-3:40.25 Batch ID: 12978 Analysis Date: 2/13/2016 SeqNo: 520615

Analyte Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Sample ID 1602108-020BMSD	SampType: MSD			Units: mg/K	g-dry	Prep Da	te: <b>2/11/2</b> 0	016	RunNo: 27	591	
Client ID: KMW-3:40.25	Batch ID: 12978					Analysis Da	te: <b>2/13/2</b> 0	016	SeqNo: 520	0616	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.849	0.0172	0.8591	0	98.9	63.5	133	0.7040	18.7	30	
Toluene	0.775	0.0172	0.8591	0	90.3	63.4	132	0.6069	24.4	30	
Ethylbenzene	0.850	0.0258	0.8591	0	98.9	54.5	134	0.6632	24.6	30	
m,p-Xylene	1.70	0.0172	1.718	0	99.0	53.1	132	1.371	21.4	30	
o-Xylene	0.763	0.0172	0.8591	0	88.8	53.3	139	0.6039	23.3	30	
Surr: Dibromofluoromethane	1.06		1.074		99.1	56.5	129		0	0	
Surr: Toluene-d8	1.08		1.074		101	64.3	131		0	0	
Surr: 1-Bromo-4-fluorobenzene	1.11		1.074		103	63.1	141		0	0	

Date: 2/17/2016



Work Order: 1602108

### **QC SUMMARY REPORT**

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

### **Sample Moisture (Percent Moisture)**

Sample ID 1602107-003ADUP	SampType: <b>DUP</b>		Units: wt%	Prep Date: 2/12/2016	RunNo: <b>27563</b>
Client ID: BATCH	Batch ID: <b>R27563</b>			Analysis Date: 2/12/2016	SeqNo: <b>519995</b>
Analyte	Result	RL	SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	9.03	0.500		8.111	10.7 20

Sample ID 1602108-013ADUP	SampType: <b>DUP</b>		Units: wt%		Prep Da	ate: <b>2/12/2</b> 0	016	RunNo: 27	563	
Client ID: KMW-2:50.5	Batch ID: <b>R27563</b>				Analysis Da	ate: <b>2/12/2</b> 0	016	SeqNo: 520	0004	
Analyte	Result	RL	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	13.5	0.500					13.06	3.50	20	



### Sample Log-In Check List

С	lient Name:	KANE	Work Order Num	ber: <b>1602108</b>	
Lo	ogged by:	Erica Silva	Date Received:	2/10/2016	4:18:00 PM
Cha	in of Custo	<u>ody</u>			
1.	Is Chain of C	ustody complete?	Yes 🗸	No $\square$	Not Present
2.	How was the	sample delivered?	<u>Client</u>		
Log	ı İn				
	Coolers are p	present?	Yes 🗸	No 🗌	NA 🗆
4.	Shipping con	tainer/cooler in good condition?	Yes 🗹	No $\square$	
5.		ls present on shipping container/cooler? nments for Custody Seals not intact)	Yes	No 🗌	Not Required ✓
6.	Was an atten	npt made to cool the samples?	Yes 🗸	No 🗌	NA 🗆
7.	Were all item	is received at a temperature of >0°C to 10.0°C*	Yes 🗹	No 🗌	NA $\square$
8.	Sample(s) in	proper container(s)?	Yes 🗹	No 🗌	
9.	Sufficient sar	mple volume for indicated test(s)?	Yes 🗹	No $\square$	
10.	Are samples	properly preserved?	Yes 🗹	No 🗌	
11.	Was preserva	ative added to bottles?	Yes	No 🗹	NA 🗆
12.	Is there head	space in the VOA vials?	Yes	No 🗆	NA 🗹
13.	Did all sample	es containers arrive in good condition(unbroken)?	Yes 🗹	No 🗌	
14.	Does paperw	ork match bottle labels?	Yes 🗹	No 🗌	
15.	Are matrices	correctly identified on Chain of Custody?	Yes 🗸	No 🗌	
16.	Is it clear wha	at analyses were requested?	Yes 🗹	No 🗌	
17.	Were all hold	ling times able to be met?	Yes 🗸	No 🗌	
Spe	cial Handl	ing (if applicable)			
18.	Was client no	otified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
	Person	Notified: Date			
	By Who	m: Via:	eMail Ph	one  Fax	In Person
	Regardi	ng:			
	Client In	nstructions:			
19.	Additional rer	marks:			
_					

#### **Item Information**

Item #	Temp ºC
Cooler	0.1
Sample	1.0

<sup>\*</sup> Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

TAT-> Next Day 2 Day 3 Day (STD)	Date/ lime		× acceived			Date/lime	Date		xelinquished
	SAI 911 OL	2				Date/lime	Date		xeinquished
Special Remarks:		essed if sample: are retained after 30 days.)		Disposal by Lab (A fee may b	© 1616	2016-02-10 € 1616	20/	Who have	Sample Disposal
	+Nitrite	Fluoride Nitrate+Nitrite	0-Phosphate	Bromide	Sulfate	Chloride	Nitrite	: Nitrate	**Anions (Circle):
Sh Se Se Sn Ti Ti U V Zn	o Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb	As B Ba Be Ca Cd Co	Individual: Ag Al	ts TAL	Priority Pollutants	RCRA-8 Pr	MTCA-5 R		*Metals Analysis (Circle):
				٢	0630	۴	25.5	4 7	MW L
			×		5480	2/9	2	نو	Smw-a:
			×		1200	٨	4	1:5	8 Kmw-1: 55
				_	1175		_	1:5	Kmw-1:5
					1025			1:3	· KMU-
					0955	_	_	1/2	Kmw-Iia
					0930	_	0	- 25	Kmw-1: 15
			×		0920			1:11	大阪るーだ
			×	_	0910	_	,	1:7.5	Kmw-1:7.5
			X	6	0900	2/8		1.6	Kmw-1:6
Comments/Depth			\$\frac{1}{2}\text{\$\frac{1}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}\text{\$\frac{\frac{1}\text{\$\frac{1}{2}\text{\$\frac{1}\text{\$\frac{1}\$\f	Sample Type (Matrix)	Sample	Sample			Sample Name
6 +80	Project No:	1	Email:		Fax:	- 5	C Nussau	S. W.	Reports To (PM): Ex
		Collected by:		Tel:				,	City, State, Zip
- 67802	Durall Market	Project Name: Location:	atra	munmenta	MUM	6	Каме	L	Client:
of W	Page:	00	Date: 2/8	_	78	Tel: 206-352-3790 Fax: 206-352-7178	Tel: :	t Ave N. 98103	3600 Fremont Ave N. Seattle, WA 98103
1602108	I aboratory Project Na (internal)				ROLL	analysica	17,000		
Chain of Custody Record	Chai				7	0		T	
	1								

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TAT → SameDay^ NextDay^ 2 Day 3 Day €10		Date/Ime		Keceived	(		Date/ lime	Date	conductor
	A GAS OF STANDARD STANDARD OF STANDARD	16	41016	Received	×	916	02-10@[	20602-10@16K	John H
The second secon	THE RESERVE AND ADDRESS OF THE PERSON.		b (A led may be assessed if samples are retained after 30 days.)	ly be assessed if s	(Apple)	☐ Disposal by La	to Client	Return to Client	ample Disposal:
Special Remarks:	Turn-around times for samples received after 4:00pm will begin	Nitrate+Nitrite	phate Fluoride	e O-Phosphate	Brumde	Sulfate	Chloride	Nitrate Nitrite	**Anions (Circle): 1
Pb Sb Se Sr Sn Ti Tl U V Zn	Fe Hg K Mg Mn Mo Na Ni I	Be Ca Cd Co Cr Cu	Al As B Ba	Individual: Ag	nts TAL	Priority Pollutants	RCRA-8		*Metals Analysis (Circle): MTCA-5
THE RESIDENCE OF THE PARTY OF T	THE PERSON NO. 10			×	+	90	+	40.25	KMW-3: 40,25
						1020		35.25	KMW-3:35.25
at an affect man in the same of the			1			SHB	O. Marie	25.5	KMW-3: 25.5
						1200		15.5	KMW-3: 15.5
The second secon				×		05/00		12.5	KMW-3: 12.5
CHIND OF BUILDING SUBSCIENCE WAS BUILDING	THE RESERVE AND THE PERSON		See for special	×		0845	-	00	KMW-3: 8
	-					0830	2/10	5.5	KMW -3: 5.5
William to the second of the second second				×		Ssal	٠	5.05	Kmw-2: 50.5
A STATE OF THE PARTY OF THE PAR					_	500)	-	ch :	KMW-2:40
					5	0925	249	:30,5	KMW 2:30,5
Comments		Carlos Ca	Company Compan	SO TO SOR SOR	mple ype	ampie	0 5		Sample Name
- 11	GW = Ground	PM Email: SI = Solid W = Water DW = Drinking Water	PM Email:	SD = Sediment	5 = 50il.	Fax:	B = Bulk, O = Other.	AQ = Aqueous, B =	Telephone: 'Matrix Codes: A = Air.
	Enc Nessan	Report To (PM):	Report						City, State, Zip:
	IL, WA		Location:				1		Address:
Collected by 67-67-802	Doyall market	ē.	Project Nan	9	ment	Sallivanmen	3	大岛	Client:
- 2	1	Page:	19/16	Date 2/9/16	0	80	Tel: 206-352-3790 Fax: 206-352-7178	N. Tel: Fax:	3600 Fremont Ave N. Seattle, WA 98103
1602108	Laboratary Project No (internal):	Laborata	The Same of			TOTAL B	trativation	- 011	
Chain of Custody Record	S					4	5	remo	

\*\*Metals Analysis (Circle): MTCA-5 \*\*\*Anions (Circle): Nitrate

RCRA-8

Priority Pollutants

ample Disposal:

Return to Client

Disposal by Lab (A fee may be ass

Date/Time

Nitrite

Chloride

Sulfate

Bromide TAL

2016-02-10 @ 164

wished

	_	
and property	*Matrix Codes:	Telephone:
151	A = Air,	
	AQ = Aqueou	206-671-0476 Fax:
	s, B = Bul	1-12
	k, 0 = Othe	74 HG
	er, P=Pro	Fax:
	duct, S=	
	Soil, SE	
	) = Sediment,	
	SL = Solid	1
AR CO	W= Wates	PM Email:
	*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Groun	enas
2000	d Wate	Massau @ ka.
	r, SW = Storm Water, WW + Waste Wate	16-611
	ter, WI	5
//	N - Waste	MA
	Water	10,10
		d.
		876

XMW-3:50.25 KMW-3:45.25 2/10/14 Sample 1530 Sample Time Sample Type (Matrix)\* 2

Individual: Ag Al O-Phosphate if samples are retained after 30 days.) As B' Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Fluoride Nitrate+Nitrite bate/Time on the following business day. received after 4:00pm will begin Turn-around times for samples Special Remarks: Sb Se Sr Sn Ti TI U V Zn

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

\*Please coordinate with the lab in advance



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Kane Environmental, Inc.

Eric Nassau 3815 Woodland Park Ave N, Ste. 102 Seattle, WA 98103

RE: Duvall Market - 67802

Lab ID: 1602314

March 02, 2016

#### **Attention Eric Nassau:**

Fremont Analytical, Inc. received 3 sample(s) on 2/29/2016 for the analyses presented in the following report.

### Gasoline by NWTPH-Gx Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward Project Manager

Date: 03/03/2016



CLIENT: Kane Environmental, Inc. Work Order Sample Summary

Project: Duvall Market - 67802

**Lab Order:** 1602314

Lab Sample ID **Client Sample ID Date/Time Collected Date/Time Received** 1602314-001 KMW-1-022916 02/29/2016 11:40 AM 02/29/2016 1:53 PM 1602314-002 KMW-2-022916 02/29/2016 12:25 PM 02/29/2016 1:53 PM 1602314-003 KMW-3-022916 02/29/2016 1:05 PM 02/29/2016 1:53 PM



### **Case Narrative**

WO#: **1602314**Date: **3/2/2016** 

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

#### I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

#### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

#### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



### **Qualifiers & Acronyms**

WO#: **1602314** 

Date Reported: 3/2/2016

#### Qualifiers:

- \* Flagged value is not within established control limits
- B Analyte detected in the associated Method Blank
- D Dilution was required
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- I Analyte with an internal standard that does not meet established acceptance criteria
- J Analyte detected below Reporting Limit
- N Tentatively Identified Compound (TIC)
- Q Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S Spike recovery outside accepted recovery limits
- ND Not detected at the Reporting Limit
- R High relative percent difference observed

#### Acronyms:

%Rec - Percent Recovery

CCB - Continued Calibration Blank

**CCV - Continued Calibration Verification** 

DF - Dilution Factor

**HEM** - Hexane Extractable Material

ICV - Initial Calibration Verification

LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate

MB or MBLANK - Method Blank

MDL - Method Detection Limit

MS/MSD - Matrix Spike / Matrix Spike Duplicate

PDS - Post Digestion Spike

Ref Val - Reference Value

RL - Reporting Limit

RPD - Relative Percent Difference

SD - Serial Dilution

SGT - Silica Gel Treatment

SPK - Spike

Surr - Surrogate



WO#: **1602314** 

Date Reported: 3/2/2016

Client: Kane Environmental, Inc. Collection Date: 2/29/2016 11:40:00 AM

Project: Duvall Market - 67802

**Lab ID:** 1602314-001 **Matrix:** Water

Client Sample ID: KMW-1-022916

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batc	h ID: F	R27969 Analyst: EM
Gasoline	ND	50.0		μg/L	1	3/1/2016 2:53:51 AM
Surr: 4-Bromofluorobenzene	98.5	65-135		%Rec	1	3/1/2016 2:53:51 AM
Surr: Toluene-d8	101	65-135		%Rec	1	3/1/2016 2:53:51 AM
Volatile Organic Compounds by  Benzene	EPA Method	<b>8260</b> 1.00		Batc µg/L	h ID: F 1	R27958 Analyst: EM 3/1/2016 2:53:51 AM
Toluene	ND	1.00		μg/L	1	3/1/2016 2:53:51 AM
Ethylbenzene	ND	1.00		μg/L	1	3/1/2016 2:53:51 AM
m,p-Xylene	ND	1.00		μg/L	1	3/1/2016 2:53:51 AM
o-Xylene	ND	1.00		μg/L	1	3/1/2016 2:53:51 AM
Surr: Dibromofluoromethane	98.2	45.4-152		%Rec	1	3/1/2016 2:53:51 AM
Surr: Toluene-d8	95.6	40.1-139		%Rec	1	3/1/2016 2:53:51 AM
Surr: 1-Bromo-4-fluorobenzene	96.6	64.2-128		%Rec	1	3/1/2016 2:53:51 AM



WO#: **1602314** 

Date Reported: 3/2/2016

Client: Kane Environmental, Inc. Collection Date: 2/29/2016 12:25:00 PM

Project: Duvall Market - 67802

**Lab ID:** 1602314-002 **Matrix:** Water

Client Sample ID: KMW-2-022916

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batc	h ID: F	R27969 Analyst: EM
Gasoline	ND	50.0		μg/L	1	3/1/2016 3:23:10 AM
Surr: 4-Bromofluorobenzene	98.4	65-135		%Rec	1	3/1/2016 3:23:10 AM
Surr: Toluene-d8	100	65-135		%Rec	1	3/1/2016 3:23:10 AM
Volatile Organic Compounds by  Benzene	EPA Method	<b>8260</b> 1.00		Batcl µg/L	h ID: F 1	R27958 Analyst: EM 3/1/2016 3:23:10 AM
Toluene	ND	1.00		μg/L	1	3/1/2016 3:23:10 AM
Ethylbenzene	ND	1.00		μg/L	1	3/1/2016 3:23:10 AM
m,p-Xylene	ND	1.00		μg/L	1	3/1/2016 3:23:10 AM
o-Xylene	ND	1.00		μg/L	1	3/1/2016 3:23:10 AM
Surr: Dibromofluoromethane	99.1	45.4-152		%Rec	1	3/1/2016 3:23:10 AM
Surr: Toluene-d8	95.7	40.1-139		%Rec	1	3/1/2016 3:23:10 AM
Surr: 1-Bromo-4-fluorobenzene	96.5	64.2-128		%Rec	1	3/1/2016 3:23:10 AM



## **Analytical Report**

WO#: **1602314** 

Date Reported: 3/2/2016

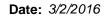
Client: Kane Environmental, Inc. Collection Date: 2/29/2016 1:05:00 PM

Project: Duvall Market - 67802

**Lab ID:** 1602314-003 **Matrix:** Water

Client Sample ID: KMW-3-022916

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batc	h ID: R	27969 Analyst: EM
Gasoline	ND	50.0		μg/L	1	3/1/2016 3:52:18 AM
Surr: 4-Bromofluorobenzene	97.1	65-135		%Rec	1	3/1/2016 3:52:18 AM
Surr: Toluene-d8	100	65-135		%Rec	1	3/1/2016 3:52:18 AM
Volatile Organic Compounds by  Benzene	EPA Method	<b>8260</b> 1.00		Batc µg/L	h ID: R	3/1/2016 3:52:18 AM
Toluene	ND	1.00		μg/L	1	3/1/2016 3:52:18 AM
Ethylbenzene	ND	1.00		μg/L	1	3/1/2016 3:52:18 AM
m,p-Xylene	ND	1.00		μg/L	1	3/1/2016 3:52:18 AM
o-Xylene	ND	1.00		μg/L	1	3/1/2016 3:52:18 AM
Surr: Dibromofluoromethane	98.4	45.4-152		%Rec	1	3/1/2016 3:52:18 AM
Surr: Toluene-d8	97.3	40.1-139		%Rec	1	3/1/2016 3:52:18 AM
Surr: 1-Bromo-4-fluorobenzene	95.4	64.2-128		%Rec	1	3/1/2016 3:52:18 AM

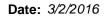




#### **QC SUMMARY REPORT**

**CLIENT:** Kane Environmental, Inc.

Project: Duvall Mark	et - 67802							Gasoline by NWTPH	H-Gx
Sample ID LCS-R27969	SampType: <b>LCS</b>			Units: µg/L		Prep Date	e: <b>2/29/2016</b>	RunNo: <b>27969</b>	
Client ID: LCSW	Batch ID: <b>R27969</b>					Analysis Date	e: <b>2/29/2016</b>	SeqNo: <b>525758</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit C	Qual
Gasoline	518	50.0	500.0	0	104	65	135		
Surr: Toluene-d8	25.0		25.00		100	65	135		
Surr: 4-Bromofluorobenzene	24.9		25.00		99.6	65	135		
Sample ID MB-R27969	SampType: <b>MBLK</b>			Units: µg/L		Prep Date	e: <b>2/29/2016</b>	RunNo: <b>27969</b>	
Client ID: MBLKW	Batch ID: <b>R27969</b>					Analysis Date	e: <b>2/29/2016</b>	SeqNo: <b>525760</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit C	Qual
Gasoline	ND	50.0							
Surr: Toluene-d8	25.9		25.00		104	65	135		
Surr: 4-Bromofluorobenzene	23.8		25.00		95.1	65	135		
Sample ID 1602312-001BDUP	SampType: <b>DUP</b>			Units: µg/L		Prep Date	e: <b>3/1/2016</b>	RunNo: <b>27969</b>	
Client ID: BATCH	Batch ID: <b>R27969</b>					Analysis Date	e: <b>3/1/2016</b>	SeqNo: <b>525751</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit C	Qual
Gasoline	ND	50.0					0	30	
Surr: Toluene-d8	25.1		25.00		101	65	135	0 0	





#### **QC SUMMARY REPORT**

# CLIENT: Kane Environmental, Inc. Project: Duvall Market - 67802

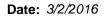
#### **Volatile Organic Compounds by EPA Method 8260**

Sample ID LCS-R27958 Client ID: LCSW	SampType: LCS Batch ID: R27958			Units: µg/L		Prep Da Analysis Da	te: 2/29/20		RunNo: <b>27</b> 9 SeqNo: <b>52</b> 9		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	•		RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.0	1.00	20.00	0	105	69.3	132				
Toluene	20.6	1.00	20.00	0	103	61.3	145				
Ethylbenzene	18.9	1.00	20.00	0	94.4	72	130				
m,p-Xylene	37.7	1.00	40.00	0	94.3	70.3	134				
o-Xylene	18.6	1.00	20.00	0	92.8	72.1	131				
Surr: Dibromofluoromethane	25.9		25.00		104	45.4	152				
Surr: Toluene-d8	24.6		25.00		98.3	40.1	139				
Surr: 1-Bromo-4-fluorobenzene NOTES:	24.7		25.00		98.9	64.2	128				

S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID MB-R27958	SampType: MBLK			Units: µg/L		Prep Dat	te: <b>2/29/2</b> 0	016	RunNo: <b>27</b> 9	958	
Client ID: MBLKW	Batch ID: <b>R27958</b>					Analysis Da	te: <b>2/29/2</b> 0	016	SeqNo: 52	5571	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Surr: Dibromofluoromethane	23.1		25.00		92.4	45.4	152				
Surr: Toluene-d8	24.0		25.00		96.1	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	23.0		25.00		91.8	64.2	128				

Sample ID 1602300-002BDUP	SampType: <b>DUP</b>			Units: µg/L		Prep Dat	e: <b>2/29/2</b> 0	116	RunNo: <b>27</b> 9	958	
Client ID: BATCH	Batch ID: <b>R27958</b>					Analysis Dat	e: <b>2/29/2</b> 0	16	SeqNo: 525	5719	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	



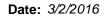


#### **QC SUMMARY REPORT**

# CLIENT: Kane Environmental, Inc. Project: Duvall Market - 67802

#### **Volatile Organic Compounds by EPA Method 8260**

Sample ID 1602300-002BDUP	SampType: <b>DUP</b>			Units: µg/L		Prep Da	ite: 2/29/20	016	RunNo: 27	958	
Client ID: BATCH	Batch ID: <b>R27958</b>					Analysis Da	ite: <b>2/29/2</b> 0	016	SeqNo: 52	5719	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Surr: Dibromofluoromethane	24.7		25.00		99.0	45.4	152		0		
Surr: Toluene-d8	24.4		25.00		97.7	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.4	64.2	128		0		
Sample ID 1602308-001AMS	SampType: <b>MS</b>			Units: µg/L		Prep Da	ite: <b>2/29/2</b> 0	016	RunNo: <b>27</b>	958	
Client ID: BATCH	Batch ID: <b>R27958</b>					Analysis Da	ite: <b>2/29/2</b> 0	016	SeqNo: 52	5728	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	25.0	1.00	20.00	0	125	65.4	138				
Toluene	24.1	1.00	20.00	0	121	64	139				
Ethylbenzene	21.8	1.00	20.00	0.2200	108	64.5	136				
m,p-Xylene	43.4	1.00	40.00	0.6400	107	63.3	135				
o-Xylene	21.2	1.00	20.00	0.3100	105	65.4	134				
Surr: Dibromofluoromethane	25.9		25.00		104	45.4	152				
Surr: Toluene-d8	24.4		25.00		97.6	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	24.8		25.00		99.2	64.2	128				
Sample ID <b>1602308-001AMSD</b>	SampType: <b>MSD</b>			Units: µg/L		Prep Da	ite: 3/1/20	16	RunNo: <b>27</b>	958	
Client ID: BATCH	Batch ID: <b>R27958</b>					Analysis Da	ate: <b>3/1/20</b>	16	SeqNo: 52	5729	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	25.6	1.00	20.00	0	128	65.4	138	25.03	2.37	30	
Toluene	24.8	1.00	20.00	0	124	64	139	24.14	2.86	30	
Ethylbenzene	22.7	1.00	20.00	0.2200	112	64.5	136	21.79	4.13	30	
m,p-Xylene	45.2	1.00	40.00	0.6400	111	63.3	135	43.38	4.02	30	
o-Xylene	22.3	1.00	20.00	0.3100	110	65.4	134	21.21	5.06	30	
Surr: Dibromofluoromethane	26.0		25.00		104	45.4	152		0	0	
Surr: Toluene-d8	24.4		25.00		97.6	40.1	139		0	0	





#### **QC SUMMARY REPORT**

CLIENT: Kane Environmental, Inc.

Project: Duvall Market - 67802

#### **Volatile Organic Compounds by EPA Method 8260**

Sample ID 1602308-001AMSD	SampType: MSD		Units: µg/L		Prep Date	e: 3/1/2016	RunNo: <b>27</b> 9	58	
Client ID: BATCH	Batch ID: <b>R27958</b>				Analysis Date	e: <b>3/1/2016</b>	SeqNo: 525	729	
Analyte	Result	RL	SPK value SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00	99.0	64.2	128	0	0	

Sample ID 1602312-001BDUP	SampType: <b>DUP</b>			Units: µg/L		Prep Da	te: <b>3/1/20</b> 1	16	RunNo: <b>27</b> 9	958	
Client ID: BATCH	Batch ID: <b>R27958</b>					Analysis Da	te: <b>3/1/20</b> 1	16	SeqNo: 52	5731	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Surr: Dibromofluoromethane	24.8		25.00		99.2	45.4	152		0		
Surr: Toluene-d8	24.0		25.00		96.1	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.5	64.2	128		0		



### Sample Log-In Check List

CI	ient Name:	KANE				Work Or	der Numbe	er: <b>160231</b> 4	1	
Lo	ogged by:	Clare Grig	gs			Date Re	ceived:	2/29/20	16 1:53:00 PM	
<u>Cha</u>	in of Custo	ody								
1.	Is Chain of C	ustody comp	olete?			Yes	✓	No $\square$	Not Present	
2.	How was the	sample deliv	vered?			Clien	<u>t</u>			
<u>Log</u>	In									
	Coolers are p	oresent?				Yes	<b>✓</b>	No 🗌	NA 🗌	
4.	Shipping con	tainer/cooler	in good condition	1?		Yes	<b>✓</b>	No 📙		
5.			n shipping contain sustody Seals not			Yes		No 🗌	Not Required 🗹	
6.	Was an atten	npt made to	cool the samples	?		Yes	✓	No 🗌	NA 🗌	
7.	Were all item	s received a	it a temperature o	f >0°C to 10.0	)°C *	Yes	<b>✓</b>	No 🗌	na 🗆	
8.	Sample(s) in	proper conta	ainer(s)?			Yes	<b>✓</b>	No 🗌		
9.	Sufficient sar	nple volume	for indicated test	(s)?		Yes	<b>✓</b>	No 🗌		
10.	Are samples	properly pre	served?			Yes	<b>~</b>	No 🗌		
11.	Was preserva	ative added	to bottles?			Yes		No 🗹	NA 🗌	
12.	Is there head	space in the	VOA vials?			Yes		No 🗹	NA 🗆	
13.	Did all sample	es container	s arrive in good co	ondition(unbrol	ken)?	Yes	✓	No 🗌		
14.	Does paperw	ork match b	ottle labels?			Yes	✓	No 🗌		
15.	Are matrices	correctly ide	entified on Chain o	of Custody?		Yes	<b>~</b>	No 🗌		
16.	Is it clear wha	at analyses v	were requested?			Yes	✓	No 🗌		
17.	Were all hold	ing times ab	le to be met?			Yes	✓	No 🗌		
Spe	cial Handl	ing (if app	olicable)							
18.	Was client no	otified of all o	discrepancies with	this order?		Yes		No 🗌	NA 🗹	
	Person	Notified:			Date					
	By Who	m:			Via:	eMa	il 🗌 Pho	ne 🗌 Fax	☐ In Person	
	Regardi	ng:								
	Client In	structions:								
19.	Additional rer	marks:								_
ltem	Information									
		Item #		Temp ⁰C						

5.5

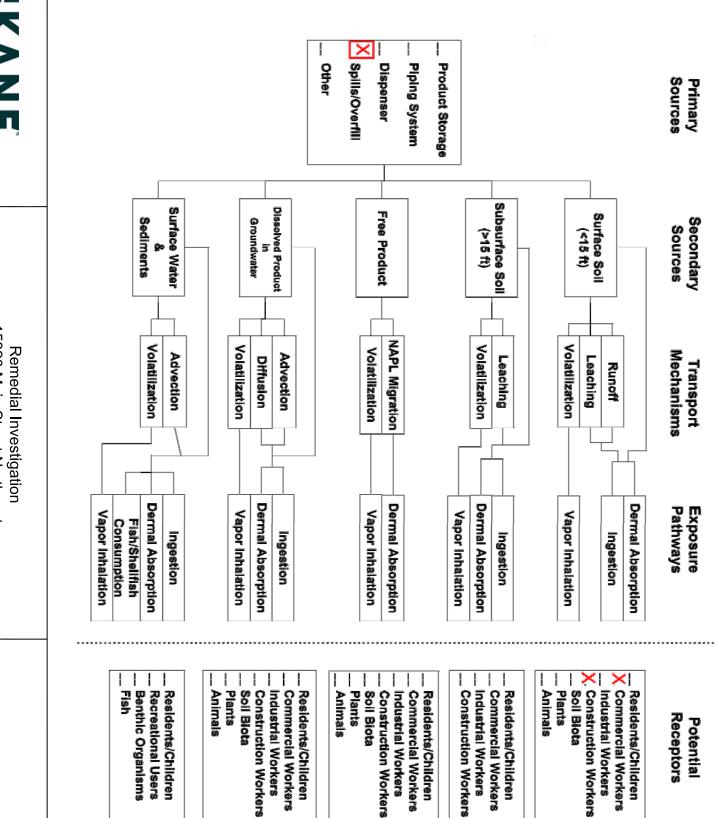
Cooler

Sample 7.8

<sup>\*</sup> Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

THE AND PROPERTY SERVEN SE	TAT-> SameDay* NextDay* 2 Day 3 Day STD	Date/Time		Réseived			Date/Time	Dat	inquished
THE ANALYTICAL PROJECT TO DOREST 2/29/16 PAGE 100 AND ANALYTICAL PROJECT NAME LOSSION:  SECULD SECULD FOR PROJECT, S. = Soll, SD - Sediment, St = Sold, W = Wester, DW = Direking Waser, DW = Glound Waster, DW = Brisking Waser, DW = Glound Waster, DW =	The second of th	0	S S	Acceived	833		129/1	and room	でいる
Amalytical  Tel: 206-352-3728  Tel: 206-352-3728  Tel: Collected by: Project Name: D. Vez II Collected by: P	held total %	trate+Nitrite	Fluoride are retained after 30 days	9 0	fate Brom	Opposite Sulf	Chlori to Client	57	*Anions (Circle): mple Disposal:
TOPOST THE CONTROL SAMPLE Sample Sample The Intertwolf School of the Intertwolf of t	Sh Se Se Sn Ti Ti U V	is Fe Hg K Mg Mn Mo Na Ni	Al As B Ba Be Ca	individual:		Priority Pol	RCRA-8		letals Analysis (Cir
Tet:    Collected by:   Project Name:   D. Vec. 11, I. V. H.     Collected by:   Project Name:   D. Vec. 11,						П			
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Tet  Sample  S									
Tel:    Collected by:   Fax:   Fax:   Froject Name:   D. Vec.     Mage:	dwarf and								
Individual  206-352-3790  206-352-7778  Date: 2/29/1L  Project Name: D. Voz. II Moz.  Location: Collected by: Collected by: Email: Project Name: D. Voz. II, LUA  Sample Sample Nate: Soll, 50 - Sediment, 51 - Solld, W = Water, DW = Drinking Water, GW = Ground Water, DW = Drinking Water, DW = Drinking Water, DW = Ground Water, DW = Ground Water, DW = Drinking Water, DW = Ground Water,	STATE OF THE STATE					4			
Tet:  Collected by:  Fax:  Fax:  Fax:  Finite  Collected by:  Finite	Markey In the American In the					Ī	T		
Tek  Sample  S	The state of the s			×	4		4/29	911220	mw-3
### Indivition:  206-352-3790  206-352-7178  Date: 2/29/1L  Page:   Deciding Maker, GW = Ground Water, GW = GW				×		1225	2/184	911/20	-r-mm
Amalyucau  Tek  Collected by:  Email:  Email:  Email:  Email:  Product, S = Soil, SD = Sediment, St = Soild, W = Water, DW = Drinking water, GW = Ground Water, Dw = Date  Type  Sample   Section of Section In Later of					_	2/29	22916	mw-1-0	
Analytical  M. Tel: 206-352-3790  B. Fax: 206-352-7178  Date: 2 / 2 9 / 1 L  Page:   Project Name:   Location:   Tel:  Collected by:  Email:   Email:  Project Name:   D. Voc. 11, LUM  Email:  Project Name:   D. Voc. 11, LUM  Email:  Project Name:  Project Name:   D. Voc. 11, LUM  Email:  Project Name:  Project Name:  Project Name:   D. Voc. 11, LUM  Email:  Project Name:  Projec	Comments/Depth		12/8/8/12/		Sample Type (Matrix)*	Sample Time	Sample Date		ample Name
Tel: 206-352-3790  MARIE ENUMERANTEL Project Name: Dove 11 Med Location: Enail:  Enu Nassau Fax: Tel: Collected by: Email: Project Name: Dove 11, 1014	Naste Water	ting Water, GW = Seound Water,	L=Solid, W=Water, DW	SD = Sediment,	oduct, S = Spil,		Bulk, O=0	AQ = Aqueous, B =	latrix Codes: A = Air,
Fremont  Analytical  t Ave N. Tel: 206-352-3790  98103  Fax: 206-352-7178  Date: 2/29/16  Project Name: Duvel 1 Medication: Duvel 1, 1224  Collected by: Encorporation: Duvel 1, 1224	40849		Email:		Fax:	(	25502		
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Temont  Analytical  N. 7el: 206-352-3790 Fax: 206-352-7178  Date: 2/29/16  Page: 1		may	Project Name:	tre	nonen	2010		Kare	Clients
	ot /	and to the fact that the fact	9/16	2/2		28 6	%-352-379 06-352-71	×	1600 Fremont Ave I Teattle, WA 98103
	0784					TOTAL B	HALIN	41	
	n of Custody Record	Chai				7	0		

# ATTACHMENT H CONCEPTUAL SITE MODEL



Potential

15820 Main Street Northeast Duvall, Washington

Project No: 67802

Conceptual Site Model

# ATTACHMENT I TERRESTRIAL ECOLOGICAL EVALUATION FORMS



#### **Table 749-1**

### Simplified Terrestrial Ecological Evaluation-Exposure Analysis Procedure

Estimate the area of contiguous (connected) undeveloped land on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre). 1) From the table below, find the number of points corresponding to the area and enter this number in the field to the right. Area (acres) **Points** 4 0.25 or less 4 5 0.5 6 1.0 7 1.5 8 2.0 9 2.5 3.0 10 3.5 11 4.0 or more 12 2) Is this an industrial or commercial property? If yes, enter a score of 3. If no, enter 3 a score of 1 3)<sup>a</sup> Enter a score in the box to the right for the habitat quality of the site, using the 1 following rating system<sup>b</sup>. High=1, Intermediate=2, Low=3 4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the 1 box to the right. If no, enter a score of 2.<sup>c</sup> 5) Are there any of the following soil contaminants present: Chlorinated 4 dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4. 6) Add the numbers in the boxes on lines 2-5 and enter this number in the box to the 9 right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.

#### Notes for Table 749-1

**Low:** Early <u>successional</u> vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.

<sup>&</sup>lt;sup>a</sup> It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score of (1) for questions 3 and 4.

<sup>&</sup>lt;sup>b</sup> **Habitat rating system.** Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:

**High:** Area is ecologically significant for one or more of the following reasons: Late-<u>successional</u> native plant communities present; relatively high species diversity; used by an uncommon or rare species; <u>priority habitat</u> (as defined by the Washington Department of fish and Wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.

**Intermediate:** Area does not rate as either high or low.

[Area Calculation Aid] [Aerial Photo with Area Designations] [TEE Table 749-1] [Index of Tables]

[Exclusions Main] [TEE Definitions] [Simplified or Site-Specific?] [Simplified Ecological Evaluation] [Site-Specific Ecological Evaluation] [WAC 173-340-7493]

[TEE Home]

<sup>&</sup>lt;sup>c</sup> Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use b mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.