

October 31, 2011

Mr. Matt Rosauer Sixth & Lenora Apartments L.L.C. 1500 Fourth Avenue, Suite 600 Seattle, WA 98101

Re: Cleanup Action Closure Report Sixth & Lenora Apartments L.L.C. 2121 Sixth Avenue Seattle, Washington 17433-05

Dear Mr. Rosauer:

This letter report summarizes cleanup activities conducted during the Sixth & Lenora Apartments Redevelopment project located at the 2121 Sixth Avenue in Seattle, Washington (Figure 1). This letter report includes an Executive Summary followed by:

- Site Description and Background
- Evaluation of Cleanup Options to Address Petroleum-Impacted Soil
- Summary of Cleanup Actions
- Compliance with MTCA Requirements for No Further Action
- References
- Limitations

Supporting tables, figures, and appendices are located at the end of the report text. The total daily volume of soil disposed of off site is presented in Table 1. A site Vicinity Map is provided on Figure 1. Excavation limits and locations of final verification soil samples are indicated on Figures 2 and 3. The locations of previous investigation boring locations and other site features are presented on Figure 4.

### EXECUTIVE SUMMARY

The Sixth & Lenora Apartments L.L.C. property (property) is located in Seattle, Washington, at the northwest corner of Sixth Avenue and Lenora Street Avenue (Figure 1). The property is being





17433-05 Page 2

redeveloped by Sixth & Lenora Apartments L.L.C. into a high-rise apartment building with retail on the street and mezzanine levels with three levels of subsurface parking.

Hart Crowser provided on-site assistance with identification and isolation of potentially impacted soils during excavation work performed by Northwest Construction, Inc., a subcontractor to the general contractor, Lease Crutcher Lewis, between May 2011 and July 2011. Field observations were used to identify potentially impacted soils and soil vapors were screened for VOCs using a photoionization detector (PID).

The new development includes a below-grade parking garage that extends approximately three levels below ground surface (bgs) and occupies most of the site footprint. The depth of the building excavation varied between approximately 30 to 35 feet below ground surface (bgs).

Based on previous investigation activities, the constituents of concern (COCs) at the site were determined to be petroleum hydrocarbons (gasoline and diesel-range) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Soil impacted by petroleum releases was limited to the upper 6 to 8 feet, primarily in the northeast corner.

Prior to performing construction activities, remedial options to address the potential petroleumimpacted soil were evaluated. Since the planned excavation extended below the maximum depth of suspected petroleum impacts, off-site disposal of the impacted soil during excavation activities was determined to be the most effective cleanup option for the site. Proposed potential UST removals and cleanup activities were detailed in Hart Crowser's Construction Contingency Plan (CCP) titled "Construction Contingency Plan (CCP) Specification for Handling and Disposing of Environmental Contamination Encountered during Excavation and Construction. Prepared for Sixth & Lenora Apartments L.L.C.," dated April 13, 2011.

The environmental cleanup activities also included removal of five underground storage tanks (USTs), primarily clustered in and near the northeast corner of the property where a former gasoline service station was located in the late 1930s through the early 1940s.

Approximately 2,200 tons of known or suspected petroleum-impacted soil were excavated and disposed of off site. Most of the excavated impacted soil was temporarily placed in stockpiles on the property prior to hauling to the CEMEX facility in Everett, Washington. CEMEX is a licensed disposal facility that thermally treats impacted soil. Some of previously characterized impacted soil was direct-loaded into trucks and transported to the CEMEX facility.

Over 70 soil characterization, stockpile, and verification soil samples were collected and analyzed during excavation activities. Analytical results from these samples and field screening were used to



17433-05 Page 3

define the vertical and lateral extent of discovered impacts and to verify the contaminated soil had been removed. Analytical results for the soil samples by characterization and stockpile soil samples and soil verification samples are presented in Tables B2 and B3, respectively.

The bottom verification soil samples collected ranged from approximately 4 to 10 feet below grade. Figure 2 illustrates the general areas of excavation limits of the impacted soils at the property. A large majority of the soil that was removed and disposed of at CEMEX contained concentrations of petroleum-related compounds below MTCA Method A cleanup levels. The reason this marginally impacted soil was also removed was because the material was odorous and it was not economically feasible to sort and segregate it in a timely manner. Therefore, the soil was removed and disposed of along with the soil with known concentrations above MTCA cleanup levels. Figure 2 also shows the general area of where these soils were located.

All excavations and UST removals described in this report were completed in general accordance with the property CCP. Verification soil samples (Figures 2 and 3) confirmed that all impacted soil within the site boundary was removed and disposed of off-site. Verification soil samples indicated TPH, BTEX, VOC, and metal concentrations were either not detected or were well below MTCA unrestricted cleanup levels.

Generally, the degree of impacted soil above MTCA Method A cleanup levels was limited to the areas adjacent to the five unknown USTs on the property, as shown on Figures 2 and 3, as well as within the upper soil approximately 6 to 8 feet below grade. These depths were well above the base of the overall construction excavation (approximately 30 to 35 feet below grade).

Prior to mass excavation along the north wall, there was one isolated area where a soil sample (N21-S1) from the drill cuttings in the upper 7 feet contained a benzene concentration of 320 ug/kg (above the MTCA Method A soil cleanup level of 30 ug/kg for benzene). Field notes during the drilling of the soldier pile indicated slight odor in the upper 7 feet and no odors below 7 feet. The soil around this piling was excavated during soil nail placement and mass excavation. Field observation did not indicate any obvious petroleum impacts. A confirmation sample (TP-23) collected near the location after removal of the impacted soil in the northeast corner indicated non-detectable concentrations of TPH-G and BTEX. In addition, petroleum hydrocarbon constituents were not detected above applicable analytical detection limits in the deeper soil sample (N21-S2) or from soil samples from the soil cuttings from the adjacent soldier piles (N22-S1) and S2 (Pile N19) and N20-S1 (Pile N17).



17433-05 Page 4

### INTRODUCTION

On behalf of Sixth & Lenora Apartments L.L.C., Hart Crowser oversaw the environmental remediation activities at the property. Our activities were completed during the construction/development of the property. Remedial activities were completed in general accordance with the Washington State Department of Ecology's Model Toxics Control Act (MTCA – Chapter 173-340 WAC) and a site-specific CCP dated April 13, 2011.

### SITE DESCRIPTION AND BACKGROUND

### Site Description

The subject property is located at 2121 Sixth Avenue, on the half-block bounded by Sixth Avenue to the east, Lenora Street to the south, Blanchard Street to the north, and an alley to the west. The property is in the Denny Regrade area of Seattle (Figure 1). The subject property is approximately 0.90 acres and consists of two King County Tax Parcels (066000-0070 and 066000-0040).

One building on the south end of the property was demolished as part of the redevelopment activities that occurred prior to cleanup and construction activities.

### Site History

The property is zoned commercial and before the current development, one third of the property most recently contained a single-story 11,600-square-foot commercial structure with rooftop parking and the remaining two thirds of the property was undeveloped land.

Historical property structures included a small gasoline service station, one- and two-story commercial structures, a paved auto sales lot, and residential buildings. The former service station was located in the northeastern corner of the property (Figure 4) from 1932 to 1947. After 1947, it was converted into a used auto sales facility with the remainder of the property blacktopped for the used auto sales lot. The former gas station building was demolished in 1968. The used auto sales building was present at this location as early as 1949.

A United Artists theater was built on this property in 1969, was closed in 1998, and was demolished in 2002. The southeast portion of the property contained single-family residences until 1951, when it was paved for the used auto sales lot. A two-story office building was constructed in 1954 and was demolished sometime between 1995 and 2005. This building housed companies dealing in life insurance, public service, reprographics (Xerox), and video production and sales.

### Geologic and Hydrogeologic Setting

The subject property is generally flat and is located on an incline that slopes downward to the north toward Lake Union. Glacial till, unsorted mixtures of clay, silt, sand, and gravel typically characterize the soil in this area of Seattle. Till is typically dense and relatively impermeable, and consists of coarse sand and gravel, that was deposited and overridden by glacial ice. Beginning in the 1890s, the downtown Seattle and Denny Regrade areas underwent a number of cutting and filling projects, with glacial deposits in the area partially cut to form existing grades.

Previous Hart Crowser geotechnical and environmental borings encountered interbedded silt and clay to a depth of approximately 20 feet below grade. The silt and clay are described as hard, damp, and gray. No groundwater was encountered, to depths of 30 to 35 feet below ground surface. The formation is typical of glaciolacustrine environments.

Based on previous investigations in the vicinity, groundwater is expected to be at elevation 60 feet (approximately 50 feet below ground surface). During our 2006 Limited Phase II Subsurface Assessment, accumulated seepage or perched groundwater was collected from the shallow probes. The entire area was unpaved during our assessment, and the small quantity of water collected from the probes was likely from the surface water infiltration.

### Previous Environmental Assessments

A previous Limited Phase II Subsurface Assessment was conducted at the property in 2006 (Hart Crowser 2006c). This Phase II assessment involved soil and grab water sampling and analysis of nine direct push probes (SP-1 through SP-9, Figure 4). Soil and grab water samples were analyzed for gasoline-, diesel-, and heavy-oil-range petroleum hydrocarbons, volatile organic compounds (VOCs), and total metals (lead, chromium, cadmium, arsenic, mercury, copper, nickel, and zinc).

Only one direct push probe soil sample from SP-5, located at the northeastern corner of the property within the area of the former gasoline station, had low concentrations of mineral spirits/Stoddard solvent-range petroleum hydrocarbons, ethylbenzene, and xylene. These detections were well below applicable MTCA cleanup levels. Total metals (lead, chromium, arsenic, copper, nickel, and zinc) were detected in all analyzed soil samples well below applicable MTCA cleanup levels. No petroleum hydrocarbon constituents were detected in any of the grab water samples analyzed. Dissolved metals (chromium and zinc) were detected in the analyzed grab water samples well below applicable MTCA cleanup levels.

17433-05 Page 6

Detailed information concerning the background and description of the property, historical activities conducted at the property, and results of previous investigations conducted at the property are available in the following Hart Crowser reports:

- Geotechnical Feasibility Study, 2121 Sixth Avenue Residential Development, Seattle, Washington, April 24, 2006 (Hart Crowser 2006a);
- Phase I Environmental Site Assessment Update, 2121 Sixth Avenue, Seattle, Washington, June 8, 2006 (Hart Crowser 2006b);
- Limited Phase II Subsurface Assessment, 2121 Sixth Avenue, Seattle, Washington, June 8, 2006 (Hart Crowser 2006c);
- Phase I Environmental Site Assessment, Sixth and Lenora Property, 2105 Sixth Avenue, Seattle, Washington, August 1, 2007 (Hart Crowser 2007);
- Geotechnical Engineering Design Study, 6th and Lenora Project, Seattle, Washington, March 27, 2008 (Hart Crowser 2008);
- Phase | Environmental Site Assessment, March 15, 2011 (Hart Crowser 2011a); and
- Construction Contingency Plan (CCP) Specification for Handling and Disposing of Environmental Contamination Encountered during Excavation and Construction, April 13, 2011 (Hart Crowser 2011b).

These assessments have identified and evaluated the nature and extent of impacted material on the subject property. Based on these previous investigations, known and potential constituents of concern for the site were identified as TPH (gasoline- and diesel-range) and BTEX. The potential impacted areas identified during these assessments appeared to be isolated and were associated either with former USTs or the former service station area (northeast corner) (Figure 4). A brief summary of each of these previous investigations is included in this section and more details of each assessment may be found in the body of the reports.

# EVALUATION OF CLEANUP OPTIONS TO ADDRESS POTENTIAL PETROLEUM-IMPACTED SOIL

Prior to performing construction activities, Hart Crowser evaluated remedial options to address the potential petroleum-impacted soil. Since the planned excavation for the Sixth & Lenora Apartments



Redevelopment Project extended below the maximum depth of identified potential contamination, off-site disposal of the impacted soil during excavation activities was determined to be the most effective option for the site. Proposed cleanup and UST removal activities were detailed in Hart Crowser's Construction Contingency Plan (CCP) titled,"Construction Contingency Plan (CCP) Specification for Handling and Disposing of Environmental Contamination Encountered during Excavation and Construction. Prepared for Sixth & Lenora Apartments L.L.C.," dated April 13, 2011.

The process used to develop the preferred cleanup approach to address petroleum-impacted soil on the property is summarized below.

### Constituents of Concern

Constituents of concern (COC) at the property were identified based on previous investigations and initial characterization during construction. Gasoline- and diesel-range petroleum hydrocarbons; and BTEX compounds were identified as the primary COCs in property soils.

### Cleanup Criteria

Soil cleanup levels for the protection of human health depend on the reasonable maximum exposure expected to occur under both the current and future site use conditions. As the site is being developed for both commercial and residential use, cleanup levels for the constituents of concern at the property were developed based on unrestricted land use. Cleanup goals for the site were based on achieving MTCA Method A unrestricted soil cleanup levels.

### **Points of Compliance**

The point of compliance for soil based on human exposure via direct contact is throughout the site from ground surface to 15 feet below ground surface. For protection of groundwater quality, the point of compliance for soil is throughout the site.

### Factors Considered to Select Preferred Cleanup Approach

The cleanup option selected to address petroleum-impacted soil at this site was soil excavation and disposal off-site for the following reasons:

 The planned redevelopment included mass excavation across the site footprint (three levels below grade. Approximately 30 to 35 feet below surrounding surface grade);

- Previous investigations and construction observations indicated limited vertical and horizontal extent of petroleum soil impacts;
- No groundwater impacts (groundwater elevation at approximately 50 to 60 feet below ground surface;
- Permanence of removing all impacted soil; and
- Cost effective. Cleanup could be conducted at the same time as redevelopment.

A site Vicinity Map is provided on Figure 1. Excavation limits and locations of final verification soil samples are indicated on Figures 2 and 3. The locations of previous investigation boring locations and other site features are presented on Figure 4.

### SUMMARY OF CLEANUP ACTIONS

In general accordance with the site-specific CCP (Hart Crowser 20011b), Hart Crowser was on the property to identify, to provide guidance in segregating, and to oversee the excavation, analysis, and disposal of petroleum-impacted soil that exceed MTCA Method A unrestricted cleanup levels that were encountered during property redevelopment excavation. Additionally, Hart Crowser observed the decommissioning and permanent removal of five USTs that were discovered during site excavation activities. No regulated USTs were known prior to construction. One closed-in-place heating oil UST was known to exist in the southwest area of the property and was identified in the CCP. Each discovered UST was treated as a regulated UST during the removal process. The USTs were vacuumed out, rinsed, cleaned, and interted by a qualified marine chemist. The USTs were extracted from the ground and removed from the site by Kleen Environmental, a certified UST removal contractor, following inspection and permitting by the Seattle Fire Department. The USTs were disposed of at the Seattle Iron & Metals Corp. facility in Seattle, Washington.

Soil was sampled and analyzed to ensure that soil at the excavation boundaries did not exceed applicable MTCA cleanup levels as identified in the CCP. Additional residual impacted soil was excavated, as needed, during general construction excavation activities.

### UST DISCOVERY, REMOVAL, AND SITE ASSESSMENT

### UST-1

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As demolition and soil excavation activities began in the northeast corner of the subject property, the excavator encountered one unknown UST near former building footings on May 16, 2011. According to field measurements, UST-1 was cylindrical in shape (3 feet in diameter, 4 feet long), 250 gallon in capacity, and likely was a heating oil tank (based on the UST removal contractor Kleen Environmental). A minimal amount of sludge material was noted in the UST when discovered. Approximately 150 gallons of rinse water and sludge-material (non-regulated petroleum) was generated and removed from the UST following rinsing and cleaning by Marine Vacuum Services. The approximate location of the discovered UST is shown on Figures 2 and 3.

Upon discovery during soil excavation in this area, the excavator may have inadvertently nicked one of the sides of UST-1, because a small isolated amount of petroleum product was noted in the soil next to the UST. The *de minimis* quantity of noted petroleum product was contained within a bermed area, and absorbent material was used immediately to contain the product.

The soil directly below UST-1 was sampled and submitted for laboratory analysis. Analytical results for the soil samples collected from UST-1 indicated both petroleum in the diesel-range as well as in the gasoline-range. The soil sample results indicated that petroleum-impacts in the gasoline-range and BTEX compounds were present above MTCA Method A cleanup levels to depths of approximately 5 feet bgs.

A marine chemist cleaned, rinsed, and inerted UST-1 on May 18, 2011, certifying that fire, explosion, and vapor hazards were reduced or eliminated. UST-1 was extracted from the ground and removed from the site by Kleen Environmental Technologies Inc. (Kleen Environmental) on May 18, 2011, following inspection and permitting by the Seattle Fire Department. UST-1 was disposed of at the Seattle Iron & Metals Corp. facility in Seattle, Washington.

### UST-2

During excavation work on May 27, 2011, a second UST (UST-2), which was filled with sand, was discovered in the southwest area of the site adjacent to the former building on the south end of the property. This was likely the known UST that was reportedly closed-in-place. According to field measurements, UST-2 was cylindrical in shape and was estimated to be approximately 500 gallons in capacity. The soil adjacent to UST-2 was sampled and submitted for laboratory analysis. Analytical results indicated detections of gasoline- and diesel/fuel oil-range petroleum hydrocarbons.

> 17433-05 Page 10

A marine chemist cleaned, rinsed, and inerted the UST-2 on May 27, 2011, certifying that fire, explosion, and vapor hazards were reduced or eliminated. Approximately 150 gallons of rinse water and sludge-material (non-regulated petroleum) was also generated and removed from the UST following rinsing and cleaning by Marine Vacuum Services. UST-2 was extracted from the ground and removed from the site by Kleen Environmental on May 27, 2011, following inspection and permitting by the Seattle Fire Department. UST-2 was disposed of at the Seattle Iron & Metals Corp. facility in Seattle, Washington.

### UST-3 and UST-4

Following additional soil characterization and during impacted soil removal activities in the northeast corner of the property, the excavator encountered two unknown USTs (UST-3 and UST-4), both containing residual petroleum product on June 2, 2011. According to field measurements, UST-3 was approximately 500 gallons in capacity, and UST-4 was approximately 1000 gallons in capacity. Approximate locations of the discovered USTs are shown on Figures 2 and 3. UST-3 was located near soldier piles N16 through N18, partly beneath the sidewalk along Blanchard Street. The soil directly below the USTs was sampled and submitted for laboratory analysis. A marine chemist vacuumed out the residual product, cleaned, rinsed, and inerted the USTs on June 3, 2011, certifying that fire, explosion, and vapor hazards were reduced or eliminated. The USTs were extracted from the ground and removed from the site by Kleen Environmental on June 3, 2011, following inspection and permitting by the Seattle Fire Department. The USTs were disposed of at the Seattle Iron & Metals Corp. facility in Seattle, Washington.

Analytical results for the soil samples collected from beneath and around UST-3 indicated that petroleum-impacts in the gasoline-range and BTEX compounds were present above MTCA Method A cleanup levels to depths of approximately 7 feet bgs. The sample results from the soils collected from beneath and around UST-4 indicated petroleum-related concentrations either below the laboratory detection limits or MTCA Method A cleanup levels.

Based on the close proximity of UST-1, UST-3, and UST-4 in the northeast corner of the property, it is likely that these USTs were associated with the former gasoline service station identified in the CCP (Hart Crowser 2011b) and previous Phase Is conducted on the property.

### UST-5

During excavation work on June 16, 2011, a fifth UST (UST-5) was discovered in the middle of the site on the north end of the property. The approximate location of the discovered UST is shown on Figures 2 and 3. According to field measurements, UST-5 had a capacity of approximately 500

17433-05 Page 11

gallons. The soil directly below the UST-5 was sampled and submitted for laboratory analysis. Analytical results indicated detections of benzene above its MTCA Method A cleanup levels.

A marine chemist cleaned, rinsed, and inerted UST-5 on June 16, 2011, certifying that fire, explosion, and vapor hazards were reduced or eliminated. UST-5 was extracted from the ground and removed from the site by Kleen Environmental on June 16, 2011, following inspection and permitting by the Seattle Fire Department. UST-5 was disposed of at the Seattle Iron & Metals Corp. facility in Seattle, Washington.

Soil excavation and removal of petroleum-impacted soil occurred at each of these UST sites. Verification soil samples were collected and analyzed following soil removal to verify that petroleum-impacted soil removal was complete prior to continued soil excavation for the construction project. A discussion of the soil removal activities and verification sampling and analysis results is presented under the subsequent sections.

### Site Assessments

A certified UST Site Assessor from Hart Crowser assessed the UST sites during removal activities in general accordance with Ecology's Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Site assessment involved observing the removed USTs for signs of rupture or leakage, field screening UST footprint soils for indications of petroleum impacts (i.e., discoloration, sheen, odor, or presence of product), and collecting samples of UST footprint soil for laboratory analysis. Laboratory analyses were selected based on the suspected use of the USTs. Analyses for the suspected former heating oil tank (UST-1) included gasoline- and diesel-range petroleum hydrocarbons. The UST-2 soil samples were submitted for a wide range of analyses including gasoline- and diesel-range petroleum hydrocarbons, benzene, toluene, ethylbenzene, and xylenes (BTEX) and a suite of metals (lead, chromium, cadmium, arsenic, mercury, copper, nickel, and zinc). Analyses for the suspected gasoline storage tanks (UST-3, UST-4, and UST-5) included gasoline- and diesel-range petroleum hydrocarbons, BTEX, and lead.

Site assessment laboratory results indicated that footprint soil from UST-1 and UST-3 were impacted by gasoline-range petroleum hydrocarbons and BTEX exceeding MTCA Method A cleanup levels. The site assessment analytical results for soil samples from UST-5 indicated benzene exceedances, and the footprint soil from UST-2 was impacted by gasoline- and diesel/fuel oil-range petroleum hydrocarbons. The site assessment analytical results for soil samples from UST-4 were below MTCA Method A cleanup levels. Of the detected lead concentrations from UST-2, UST-3, UST-4, and UST-5, none exceeded the MTCA Method A cleanup levels. Analytical results are summarized in Appendix B.



Overexcavation in the UST areas did not occur until the site assessment analytical results were received. The maximum depth of overexcavation in the UST areas was primarily around 7 feet below grade, except for UST-5, which was to a depth of approximately 8 feet below grade. No groundwater was encountered during overexcavation in the UST areas.

### Petroleum-Impacted Soil Excavation and Stockpiling

Hart Crowser was on site to identify, to provide guidance in segregating, and to oversee the off-site removal of impacted soil and USTs encountered during construction activities at the subject property. Cleanup and construction observation services were conducted by the full-time, on-site geotechnical/environmental field representative, as needed.

In general, the petroleum impacted soil was isolated within the northeast corner of the property within the upper 6 to 8 feet of soil and around the discovered USTs. During excavation within this area, soil was examined for petroleum-related compounds, indicators such as sheen, discoloration, and/or odor. In addition, discrete samples of excavated soil were collected for headspace field screening using a PID to guide further excavation. Discrete and composite soil samples were collected for laboratory analysis to characterize impacted soil for appropriate disposal, and to verify that soil remaining in place did not exceed MTCA Method A cleanup levels. The soil verification samples were collected from beneath areas of excavated impacted soil to assess whether the removal action achieved the cleanup and performance standards described in the CCP (Hart Crowser 2011b).

Generally, the degree of impact was limited to the areas adjacent to the five unknown USTs on the property, as shown on Figures 2 and 3. During overexcavation in the three UST areas, a series of test pits were completed to help characterize the suspected impacted soil and delineate the outer extent of petroleum contamination. Laboratory analytical results indicated detections of gasoline-, diesel/fuel oil-range petroleum hydrocarbons and BTEX at concentrations above MTCA Method A unrestricted cleanup levels. The largest area of petroleum-impacted soil was encountered in the northeastern corner of the property and was associated with three USTs (UST-1, UST-3, and UST-4) near the former gasoline service station. Overexcavation of impacted soil in the three UST areas varied but was generally completed to a depth of approximately 6 to 8 feet below grade.

Impacted soil was temporarily stockpiled within the excavation to await transport to the disposal facility. Soil was stockpiled to minimize interference with ongoing construction activities. Impacted soil disposal is discussed in the following section of this report.

Over 70 soil samples were collected and analyzed to characterize the soil and identify impacted soil for removal and appropriate disposal, and to verify that soil remaining in place did not exceed

17433-05 Page 13

MTCA Method A cleanup levels. Twenty-four final soil verification samples were collected from the excavation bottom and side walls beneath the areas of known impacted soil. Verification samples were analyzed for gasoline-range petroleum hydrocarbons and BTEX compounds to assess whether the remaining soil met MTCA Method A unrestricted cleanup levels. Select samples were also analyzed for diesel-range petroleum hydrocarbons, VOCs, metals, or lead. In areas of the excavation where concentrations exceeded cleanup levels, soil was overexcavated where construction constraints allowed until analytical results for soil verification samples met the cleanup criteria. Figures 2 and 3 show the locations of characterization samples that exceeded cleanup levels and were overexcavated for off-site disposal, as well as the locations of the final verification soil samples. Analytical results for the soil verification samples were either non-detect or at concentrations below applicable cleanup levels.

One soil sample from N18 soldier pile cuttings (N21-S1) collected along the east wall contained a benzene concentration of 320 micrograms per kilogram (ug/kg), which exceeds the MTCA Method A soil cleanup level of 30 ug/kg. Field notes during the drilling of this soldier pile indicated slight odors in the upper 7 feet and no odors below 7 feet. The soil around this piling was excavated at the time of soil nail placement. Field observations did not indicate any obvious petroleum impacts. A confirmation sample (TP-23) collected near this location after removal of the impacted soil in the northeast corner did not contain detectable concentrations of TPH-G and BTEX. In addition, petroleum hydrocarbon constituents were not detected above applicable analytical detection limits in the deeper soil sample (N21-S2) or from soil samples from the soil cuttings from the adjacent soldier piles (N22-S1 and S2 [Pile N19] and N20-S1 [Pile N17]).

### Impacted Soil Disposition

All soil from within the final excavation limits was removed from the subject property. Petroleumimpacted soil with constituent concentrations above MTCA Method A unrestricted cleanup levels was disposed of off site by Northwest Construction Inc. at the Everett, Washington, CEMEX facility. Results of characterization soil samples collected during excavation of impacted soil were used to profile the soil for disposal. The majority of the impacted soil removed and disposed of at CEMEX contained petroleum hydrocarbon concentrations below MTCA Method A unrestricted cleanup levels, or even below laboratory detection limits. However, due to time constraints and practicability of segregating and sampling and analyzing all of the potentially impacted soil, it was all disposed of off site at CEMEX.

Impacted soil was either temporarily stockpiled within the excavation to await loading and transport for disposal, or it was loaded directly onto trucks during excavation. The construction contractor, Northwest Construction Inc., was responsible for arrangements to haul the impacted soil to the CEMEX facility.

17433-05 Page 14

Table 1 summarizes impacted soil quantities hauled to the CEMEX facility; scale tickets are provided in Appendix D. In total, CEMEX received 84 loads (2195.79 tons) of petroleum-impacted soil.

### COMPLIANCE WITH MTCA REQUIREMENTS FOR NO FURTHER ACTION

Results of the site soil characterization performed by Hart Crowser and others prior to and during construction activities have shown that petroleum soil impacts were contained within the soil at approximately 103 to 105 feet in elevation (upper 8 feet bgs). The base of the overall site excavation was approximately 75 to 80 feet (30 to 35 feet below grade). Groundwater was not encountered during the mass excavation.

Approximately 2,200 tons of confirmed and marginal potentially petroleum-impacted soil was removed and disposed of off site. Concentrations of contaminants of concern (primarily petroleum-derived contaminants) in soils remaining beneath the property are all well below MTCA unrestricted cleanup levels.

### **Exposure Pathways**

**Direct Contact Pathway.** Petroleum released likely from former USTs in the general vicinity around the discovered USTs to depths of approximately 6 to 8 feet below grade. As part of construction activities, the site was excavated to approximately 30 to 35 feet below grade, therefore, all of the impacted soil has been removed from the property and the direct contact exposure pathway has been eliminated.

All of the verification soil samples collected on the property and analyzed following impacted soil removal were below MTCA Method A unrestricted cleanup levels. These data results indicate that direct contact is no longer a complete exposure pathway.

**Terrestrial Ecological Evaluation.** Per WAC 173-340-7490(4)(b) and WAC 173-340-7491(a), since the entire property was excavated to approximately 30 to 35 feet below grade, the site satisfies the standard point of compliance for soil contamination and is exempt from requirements for institutional controls and a separate terrestrial ecological evaluation.

**Soil Vapor Pathway.** Similar to the Direct Contact Pathway discussion, since all of the impacted soil has been removed from the property and all of the verification soil samples collected and analyzed following impacted soil removal were below MTCA Method A cleanup levels for soils, the soil vapor pathway is not a potential exposure pathway.

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17433-05 Page 15

**Soil to Groundwater Pathway.** All of the petroleum-impacted soils were removed and disposed of off-site. Soil sample analysis confirms that the petroleum-impacted soil was successfully removed; therefore, the remaining soil on the property no longer poses a risk to groundwater quality.

Following the extensive removal and disposal of petroleum-impacted soil during construction activities and based on field observations and soil verification analytical results, we believe current site conditions satisfy MTCA Method A cleanup requirements for protectiveness of human health and the environment.

### CONCLUSION

Based on the analytical results from the verification soil samples and other assessments of soil conditions within the final excavation limits, the remedial action on the subject property has been completed and meets the substantive requirements of MTCA.

### REFERENCES

Hart Crowser 2006a. Geotechnical Feasibility Study, 2121 Sixth Avenue Residential Development, Seattle, Washington. Prepared for Kennedy Associates Real Estate Counsel, by Hart Crowser, Inc. dated April 24, 2006.

Hart Crowser 2006b. Phase I Environmental Site Assessment Update, 2121 Sixth Avenue, Seattle, Washington. Prepared for Kennedy Associates Real Estate Counsel, by Hart Crowser, Inc. dated June 8, 2006.

Hart Crowser 2006c. Limited Phase II Subsurface Assessment, 2121 Sixth Avenue, Seattle, Washington. Prepared for Kennedy Associates Real Estate Counsel, by Hart Crowser, Inc., dated June 8, 2006.

Hart Crowser 2007. Phase I Environmental Site Assessment, Sixth and Lenora Property, 2105 Sixth Avenue, Seattle, Washington. Prepared for Pine Street Group, L.L.C., by Hart Crowser, Inc. dated August 1, 2007.

Hart Crowser 2008. Geotechnical Engineering Design Study, 6th and Lenora Project, Seattle, Washington. Prepared for Pine Street Group, L.L.C., by Hart Crowser, Inc. dated March 27, 2008.

17433-05 Page 16

Hart Crowser 2011a. Phase I Environmental Site Assessment, Sixth & Lenora Apartments, L.L.C., 2121 Sixth Avenue, Seattle, Washington. Prepared for Pine Street Group, L.L.C., by Hart Crowser, Inc., dated March 15, 2011.

Hart Crowser 2011b. Construction Contingency Plan (CCP) Specification for Handling and Disposing of Environmental Contamination Encountered during Excavation and Construction. Prepared for Sixth & Lenora Apartments L.L.C., by Hart Crowser, Inc., dated April 13, 2011.

Kleen Environmental, 2011a. WAC 173-340-545(3)(a) Notice of Independent Remedial Action, 2121 6th Street, Seattle, Washington 98101. Prepared for the Seattle Department of Planning and Development by Kleen Environmental Technologies Inc., dated May 18, 2011.

Kleen Environmental, 2011b. WAC 173-340-545(3)(a) Notice of Independent Remedial Action, 2121 6th Street, Seattle, Washington 98101. Prepared for the Seattle Department of Planning and Development by Kleen Environmental Technologies Inc., dated May 27, 2011.

Kleen Environmental, 2011c. WAC 173-340-545(3)(a) Notice of Independent Remedial Action, 2121.6th Street, Seattle, Washington 98101. Prepared for the Seattle Department of Planning and Development by Kleen Environmental Technologies Inc., dated June 3, 2011.

Kleen Environmental, 2011d. WAC 173-340-545(3)(a) Notice of Independent Remedial Action, 2121 6th Street, Seattle, Washington 98101. Prepared for the Seattle Department of Planning and Development by Kleen Environmental Technologies Inc., dated June 13, 2011.

### LIMITATIONS

Work of this project was performed, and this letter report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed, in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Sixth & Lenora Apartments L.L.C., for specific application to the subject property. Use of this report by Sixth & Lenora Apartments L.L.C., is with the understanding that the limitations and terms and conditions of the contract between Hart Crowser and Sixth & Lenora Apartments L.L.C., apply. This report is not meant to represent a legal opinion. No other warranty, express or implied, is made.

17433-05 Page 17

Any questions regarding our work and this letter report, the presentation of the information, and the interpretation of the data are welcome and should be referred to the undersigned.

Sincerely,

HART CROWSER, INC.

Juli K. W. Wukelin

JULIE K.W. WUKELIC Senior Principal Engineer

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**COLLEEN RUST, LG** Project Hydrogeologist

Attachments:

Table 1 -	Impacted Soil Disposal Quantities
Figure 1 -	Vicinity Map
Figure 2 -	Site and Previous Exploration Plan
Figure 3 -	Final Verification Soil Sample Location Plan
Figure 4 -	Final Verification Soil Sample Location Plan Inset
Appendix A -	Previous Field Explorations and Sampling Procedures
Appendix B -	Summary of Samples and Analytical Results
Table B-1 -	Sample Location and Analysis Summary
Table B-2 -	Analytical Results for Characterization Soil Samples
Table B-3 -	Analytical Results for Verification Soil Samples
Table B-4 -	Analytical Results for Previous Soil Probe Samples
Table B-5 -	Analytical Results for Previous Grab Groundwater Samples
Appendix C -	Chemical Data Quality Review and Certificates of Analysis
Appendix D -	Advanced Analytical Laboratory and Analytical Resources, Inc. Summary of Scale Ticket Information and Dates CEMEX
	CEMEA

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### Table 1 - Impacted Soil Disposal Quantities

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Date	Number of Loads	Weight in Tons
6/2/2011	29	623.24
6/16/2011	53	1508.62
6/17/2011	2	63.93
TOTAL	84	2195.79

Note: These impacted soils were disposed of at the CEMEX facility in Everett, Washington.

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### **APPENDIX A** PREVIOUS FIELD EXPLORATIONS AND SAMPLING PROCEDURES

Hart Crowser 17433-05 October 31, 2011

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Appendix A

### APPENDIX A PREVIOUS FIELD EXPLORATIONS AND SAMPLING PROCEDURES

Hart Crowser collected discrete and composite soil samples during excavation at the Sixth & Lenora Apartments L.L.C. property to characterize impacted soil for off-site disposal and to verify removal of petroleum-impacted soil. The field procedures and methods used for this work are described below. Final verification soil sample locations are shown on Figure 3.

### Field Exploration

Soil samples were evaluated in the field using visual and odor observations in addition to a MultiRae photoionization detector (PID).

Hart Crowser field representatives collected discrete soil samples for PID analysis by collecting 3 to 6 ounces of soil in a pint-sized Ziploc bag or in a 4ounce glass sample jar covered with aluminum foil. After several minutes, the end of the PID was inserted into the bag, or through the aluminum foil, and the peak PID reading was noted. The approximate location relative to site features, the depth below ground surface, and visual and odor observations were noted.

### Soil Sampling Procedures

Discrete grab and three- or five-point composite soil samples were collected for chemical analysis with a clean stainless steel spoon and/or clean disposable nitrile gloves and placed in pre-cleaned, laboratory-supplied, 4-ounce glass sample jars and appropriately preserved 40-ml VOA bottles. Sufficient soil was removed to overfill the 4-ounce glass sample jars. Methanol-preserved 40-ml VOA bottles were filled with a 5-gram soil plug, based on EPA Method 5035 procedures. The jars were sealed and labeled. Filled sample jars were stored in a cooler containing bagged ice before submittal to the chemistry laboratory under chain of custody protocols.

Soil samples were placed in the transfer cooler at Hart Crowser upon return from the site. Samples were submitted to the analytical laboratory (Advanced Analytical Laboratory) using chain-of-custody protocols. Samples were transferred to the analytical laboratory either by courier or by requesting expedited sample pickup from the Hart Crowser transfer cooler.

### **Previous Direct Push Probe Explorations**

With depths ranging from 10 to 23 feet below the ground surface, nine direct push probe explorations, designated SP-1 through SP-9, were conducted on May 4, 2006. The push probe explorations used a 2-inch-diameter probe and were advanced with a truck-mounted rig subcontracted by Hart Crowser. A field geologist from Hart Crowser continuously observed the probing and collected the soil samples. Soil samples were collected using an acetate-lined plastic sleeve sampler pushed by the push probe rig. Sample liners are made of heavy-duty clear acetate plastic for convenient inspection of the soil sample. Soil samples were generally collected in continuous 4-foot-depth intervals. Samples were classified in general accordance with ASTM D 2488 and were screened for potential soil contamination. The density/consistency of the soil (where presented parenthetically on the probe logs to indicate their having been estimated) is based on visual observation and probe reaction. Detailed logs were prepared of each probe. The probe logs are presented on Figures A-2 through A-10 at the end of this appendix. Locations of previous direct push probe explorations are shown on Figure 2.

### **Previous Boring Explorations**

With depths ranging from 63 to 75 feet below the ground surface, four hollowstem auger borings, designated HC-1 through HC-4, were drilled from April 9 to 15, 1999. With depths of 49 feet below the ground surface, two hollow-stem auger borings, designated HC-10 and HC-11, were drilled from October 18 and 19, 2007. The borings used a 3-3/8-inch inside diameter hollow-stem auger and were advanced with a truck-mounted drill rig subcontracted by Hart Crowser. The drilling was continuously observed by an engineering geologist from Hart Crowser. Detailed field logs were prepared of each boring. Using the Standard Penetration Test (SPT), we obtained samples at 2-1/2- to 5-foot-depth intervals. With a depth of 43.5 feet below the ground surface, one truck mounted, 36inch-diameter auger test hole, designated TH-1 was drilled on October 16, 2007. We observed and logged drilling of this test hole, but no samples were collected. A groundwater monitoring well was installed in boring HC-2, with the screened interval from 54 to 59 feet below the ground surface. The borings logs are presented on Figures A-3 through A-9 at the end of this appendix. Locations of previous boring explorations are shown on Figure 2.

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Hart Crowser 17433-05 October 31, 2011

### PREVIOUS DIRECT PUSH PROBE AND BORING LOGS

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### Key to Exploration Logs

### **Sample Description**

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

#### Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and probes is estimated based on visual observation and is presented parenthetically on the

logs SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 to 4	Very soft	0 to 2	<0.125
Loose	4 to 10	Soft	2 to 4	0.125 to 0.25
Medium dense	10 to 30	Medium stiff	4 to 8	0.25 to 0.5
Dense	30 to 50	Stiff	8 to 15	0.5 to 1.0
Very dense	>50	Very stiff	15 to 30	1.0 to 2.0
		Hard	>30	>2.0

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Grab (Jar)

Core Run

Bag

### Sampling Test Symbols

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Ľ۵	Split Spoon	
	Shelby Tube (Pushed)	
	Cuttings	

MAJOR DIVISIONS			MAJOR DIVISIONS SYMBOLS		
	·····	<u> </u>	GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS	SAND AND	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
LARGER THAN NO. 200 SIEVE ' SIZE	SANDY SOILS OF COARSE FRACTION PASSING ON NO. 4 SIEVE	(LITTLE OR NO FINES)		SP	PODRLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS LEAN CLAYS
00120				OL	ORGANIC SILTS AND ORGANIC SILT CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE				MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INDRGANIC CLAYS OF HIGH PLASTICITY
				он	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	1.	·			

PEAT, HUMUS, SWAMP SOLS WITH HIGH ORGANIC CONTENTS

PT

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#### Moisture

DryLittle perceptible moistureDamp Some perceptible moisture, likely below optimumMoistLikely near optimum moisture contentWetMuch perceptible moisture, likely above optimum

Minor Constituents	Estimated Percentage
Trace	<5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

#### Laboratory Test Symbols

GS	Grain Size Classification
CN	Consolidation
ນບ	Unconsolidated Undrained Triaxial
CU	Consolidated Undrained Triaxial
CD	Consolidated Drained Triaxial
QU	Unconfined Compression
DS	Direct Shear
к	Permeability
PP	Pocket Penetrometer
	Approximate Compressive Strength in TSF
τv	Torvane
	Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
	Water Content in Percent
	Liquid Limit
•	Natural Plastic Limit
PID	Photoionization Detector Reading
CA	Chemical Analysis

- CA Chemical Analysis
- DT In Situ Density in PCF



SHEET 1743300BL.GPJ HC CORP.GDT 1/28/08

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HIGHLY ORGANIC SOILS

### Key to Exploration Logs (Pre-2006)

### **Sample Description**

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Dens	ity/consistency, n	noisture, color, mino	r constituents, MAJO	OR CO	NSTITUE	NT, additional ren	narks.	
Soil o		<b>cy</b> cy in borings is relate d on visual observati					Soil density/consistency in test	
SAND Densit	or GRAVEL y	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency		Per	ndard netration sistance(N) Blows/Foot	Approximate Shear Strength in TSF	
Very lo	oose	0 - 4	Very soft		C	) - 2	<0.125	
Loose		4 - 10	Soft		2	2 - 4	0.125 - 0.25	
Mediu	m dense	10 - 30	Medium stiff		4	4 - 8	0.25 - 0.5	
Dense	•	30 - 50	Stiff		٤	3 - 15	0.5 - 1.0	
Very d	lense	>50	Very stiff		15	5 - 30	1.0 - 2.0	
	<u>.</u>		Hard	<u> </u>		>30	>2.0	
Mois	sture			Min	or Cons	tituents	Estimated Percentage	
Dry	Little percepti	ble moisture	•	Not	identified	in description	0 - 5	
Dam	p Some percep	tible moisture, proba	ably below optimum	Slig	htly (claye	ey, silty, etc.)	5 - 12	
Mois	t Probably nea	r optimum moisture	content	Clay	/ey, silty, :	sandy, gravelly	12 - 30	
Wet	Much percept	lible moisture, proba	bly above optimum	Ver	y (clayey,	silty, etc.)	30 - 50	
Leg	ends	·		[	Test S	ymbols		
Sam	pling Test Syn			ר	1651 0	ymbols		
Jan	iping rescoyn			`	GS	Grain Size Clas	sification	
Bot	ing Samples	<u>Test l</u>	Pit Samples		CN	Consolidation		
$\boxtimes$	Split Spoon	$\bowtie$	Grab (Jar)		UU	Unconsolidated Undrained Triaxial		
					CU	Consolidated Undrained Triaxial		
			Bag		CD	Consolidated D		
	Cuttings		Shelby Tube		QU	Unconfined Co	mpression	
$\square$	Core Run				DS	Direct Shear		
*	No Sample F	Recovery			к	Permeability		
Р	Tube Pushed	-			PP	Pocket Penetro Approximate (	meter Compressive Strength in TSF	
				_	τv	Torvane	Shear Strength in TSF	
Gro	undwater Obse	ervation Wells			CBR	California Beari	-	
		Monument			MD	Moisture Densi	-	
		Surface Seal			AL	Atterberg Limits	· · ·	
		Gravel Backfill					Water Content in Percent	
		Riser Pipe Bentonite	/				Liquid Limit Natural	
		Groundwater Level					Plastic Limit	
l		at Time of Drilling	(ATD)		PID		Detector Reading	
		Well Screen			CA	Chemical Analy		
		Sand Pack			DT	In Situ Density T	est	
		Native Material						
	ş <del></del>	Groundwater Seepa	age (Test Pits)				Π	
l	)							



Soil Descriptions	Depth in Fest	Sample	LAB TESTS & (PID)
Crushed 1-inch minus Gravel surface over (loose), moist, gray, silty, sandy GRAVEL with trace of concrete fragments. (FILL)	<b>┐╷</b>	<b>S</b> -1	-(3.5)
(Medium stiff), moist, light gray SILT, thin laminations.	-	S-2	-(6.1) CA
(Hard), moist, light gray to gray SILT with scattered massive zones.	5	S-3	- (4.9)
(Very hard), moist, gray SILT, massive with scattered gravel.	10	S-4	-(4.7)
		S-5	-(5.0) CA
		S-6	-(2.9)
(Very hard), moist, gray SILT.	-  -+ 15   -   -	<b>s</b> -7	-(4.7)
	-20	S-8	-(3.7)
Thin laminations and zones of blocky soil structure.		S-9	~(3.6)
Thin laminations and zones of blocky soil structure. Bottom of Probe at 23.0 Feet. Completed 05/04/06.	-25		

HARTCROWSER 17281-01 05/06 Figure A-2

Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
Crushed 1-inch minus Gravel surface over (loose), moist, brownish gray, silty, gravelly SAND with trace of organic material and wood fragments. (FILL)	<b>↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓</b>	S-1	- (3.5)
(Hard), moist, gray SILT, massive.		S-2	-(1.0) CA
(Very hard), moist, gray SILT with scattered slickensided surfaces. Bottom of Probe at 11.0 Feet.		S-3	- (0.3)
Note: Groundwater perched on top of hard SILT.			
			•
	-20		
	⊥ <sub>25</sub>		

5 HARTCROWSER 17281-01 05/06 Figure A-3

- Refer to Figure A-1 for explanation of descriptions and symbols.
  Soil descriptions and stratum lines are Interpretive and actual changes may be gradual.
  Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

STRATAPROBE W/O WELL 1728101SP.GPJ HC\_CORP.GDT 5/16/06



HARTCROWSER 17281-01 05/06 Figure A-4

Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



**HARTCROWSER** 17281-01 05/06

Figure A-5

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



HARTCROWSER 17281-01 05/06 Figure A-6

- 1. Refer to Figure A-1 for explanation of descriptions and symbols. 2. Soil descriptions and stratum lines are interpretive and actual changes
- may be gradual. 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date

specified. Level may vary with time.

ך <b>ר</b>	. –	_
	S-1	-(0.7)
5	S-2	-(1.0) CA
	S-3	-(1.3) CA
	S-4	- (0.5)
-		
		-5 S-2 -5 S-2 -10 S-3 -10 S-4 -15 S-4 -20 $-15$ $-10$

HARTCROWSER 17281-01 05/06 Figure A-7

- Refer to Figure A-1 for explanation of descriptions and symbols.
  Soil descriptions and stratum lines are Interpretive and actual changes may be gradual.
  Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



HARTCROWSER 17281-01 05/06 Figure A-8

1. Refer to Figure A-1 for explanation of descriptions and symbols. 2. Soll descriptions and stratum lines are interpretive and actual changes

may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Soil Descriptions	Depth in Feet	Sample	LAB TESTS & (PID)
CONCRETE slab over crushed GRAVEL over (medium stiff), moist, brownish gray to gray, fine sandy SILT with thin laminations.		Ń	
Seepage zones.		S-1	- (0.5)
(Stiff), moist, gray, fine sandy SILT with thin laminations.		S-2	-(1.0) CA
Scattered massive zones.		S-3	- (0.7)
(Hard to very hard), moist, gray SILT with thin faminations.	10	S-4	-(0.3)
Bottom of Probe at 13.0 Feet. Completed 05/04/06.		Ĥ	
Note: Grab groundwater sample collected for chemical analysis.	- 15 - - - -		
STRATAPROBE W/O WELL 17281015P.GPJ	- 20		
	⊥ <sub>25</sub>		

ii ii HARTCROWSER 05/06

17281-01 Figure A-9

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Refer to Figure A-1 for explanation of descriptions and symbols.
 Soll descriptions and stratum lines are Interpretive and actual changes may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
# Strataprobe Log SP-9

Soil Descriptions	Depth In Feet	Sample	LAB TESTS & (PID)
Crushed 1-inch minus Gravel over silty,	·		۲
<u>sandy GRAVEL. (FILL)</u> (Medium stiff), moist, gray, fine sandy SILT with thin laminations.		S-1	- (0.4)
· ·		S-2	-(0.2) CA
(Stiff to hard), moist, gray, fine sandy SILT with thin laminations and scattered massive zones.		S-3	- (<0.1)
		M	
Bottom of Probe at 10.0 Feet. Completed 05/04/06.			
	-15		
	-20		

H HARTCROWSER 17281-01 05/06 Figure A-10

- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soll descriptions and stratum lines are Interpretive and actual changes may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Location: See Figure 2. Approximate Ground Surface Elevation: 112 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: B-59 Mud Rotary Hammer Type: SPT w/140 lb. Auto Hammer Hole Diameter: 6 inches Logged By: P. Cordell Reviewed By: P. Reed

						STANI PENE	DARD	RESIS	TANCE	LAB TESTS
USCS Graph Class Log		Depth in Feet		Sampl	le 🔺		per Foot		40 E	<b>.</b> .
SP	6 inches of Concrete over gravelly SAND. (Base Course)	10			]		00	30	40 5	)+ 
CL-ML	(Stiff to very stiff), moist, gray, clayey SILT to silty CLAY with trace sand, and some roots. No bedding or laminations observed. (Possible Fill? to 5 or 8 feet) (Boring was advanced by vac truck to 8 feet, due to proximity to electrical vault. Hand auger samples collected ahead of vacuuming.			S-1 ∭	1		•			– Hand Auger
	Becomes slightly sandy at 5 feet.	5		s-2 Ⅲ	]	· · · ·	•			-Hand Auger
		- - -		s-3 🎹	ļ		•			-Hand Auger
	Becomes very stiff to hard. Appears to be massive.	-10	· .	s-4	12 16 21		•			
	≺Moist to wet sample.	-		s-5	9 12 14					
68				,		-				
CCORP.GDT 3/21/	Very stiff to hard, damp to moist, gray, silty CLAY with silt partings//laminations, slickensides, and blocky/prismatic structure. Trace coarse Sand and fine Gravel at 18 feet.			s-6	9 10 12					
NEW BORING LOG 1743300BL.GPJ HC.CORP.GDT 3/21/08				s-7	7				<b>4</b>	
NEW BORING		25 .			11	0 2	20 40 r Content i	60 n Percent		PP>5.0 AL 00+

 Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with the support of the superior of with time.

-+-HARTCROWSER 10/07 17433-00 Figure A-3 1/2

Location: See Figure 2. Approximate Ground Surface Elevation: 112 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: B-59 Mud Rotary Hammer Type: SPT w/140 lb. Auto Hammer Hole Diameter: 6 inches Logged By: P. Cordell Reviewed By: P. Reed



with time.

10/07 Figure A-3 2/2

17433-00

Location: See Figure 2. Approximate Ground Surface Elevation: 108 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: B-59 Mud Rotary Hammer Type: SPT w/140 lb. Auto Hammer Hole Diameter: 6 inches Logged By: P. Cordell Reviewed By: P. Reed



HARTCROWSER 17433-00 10/07 Figure A-4 1/2

 Refer to Figure A-1 for explanation of descriptions and symbols.
 Soli descriptions and stratum lines are interpretive and actual changes may be gradual.
 USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Location: See Figure 2. Approximate Ground Surface Elevation: 108 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: B-59 Mud Rotary Hammer Type: SPT w/140 lb. Auto Hammer Hole Diameter: 6 inches Logged By: P. Cordell Reviewed By: P. Reed



with time.

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bil Descriptions ound Surface Elevation in Feet: 117	Depin in Feet	Sample	STANDARD PENETRATION RESISTANCE A Blows del Foot	LAÐ TESTS
Sund Sunace Elevation in Feet: 117			1 2 5 KD 20 50 MO	
IO inches of Concrete over medium dense, moist, gray, sandy GRAVEL. (FILL)		5-1 🔀		
Very stiff to hard, moist, gray, interbedded SILT and CLAY.	<del> </del> 5   E	5-2 X 5-3 X		-AL
		5-4 🛛		
		S−5 ≠=		
· · · ·	- <u>-</u> 20	s-6 🛛		
· · · · · · · · · · · · · · · · · · ·	<del>[</del> 25	s-7 🛛		
Very dense, moist, gray and tan, gravelly, silt SAND.		S-5 ≈=	E	-6S
		5-9 🔀	- 450/	4
	40	5-10 🔀		n
		S-11 ===	÷ 50/	
	45 			•
Hard, damp to moist, dark gray, Interbedded SILT and CLAY,		S-12 🗙		
Very dense, moist to wet, slightly			E 50/	1
gravelly, very silty SAND.		S-13 🔫		e .
Very dense, moist to wet, silly, sandy GRAVEL.		5-14	E 50/	1
	-70	5-15		3
Bottom of Boring at 745 Feet		· S-16 😖	300	1/6 -GS
Bottom of Boring at 74,5 Feet. Completed 4/11/99.				
	I T <sup>90</sup>	1 1	1 2 5 10 20 50 100 • Water Content in Percent	L
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 con descriptions and stratum lines are interpretive and actual changes may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. • : ۰.

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J-7141 4/99 Figure A-5

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Boring Log h

il Descriptions		Depth in Feel	Sample	RESISTANCE		TESTS
ound Surface Elevátio	n in Feel: 112			▲ Blows per Foot 1, 2, 5, 10	20 50 100	
10 inches of Con dense, moist, gra (FILL)	crele over medium ay, gravelly SAND.		S−i === 5-2 X			
Very stiff to have interbedded SIL	d, moist, gray, T and CLAY,		S-3 X 5-4, X			
			5-5 🛛			
Slightly gravelly.	• •	<u>-</u> 15	S-6 🗙			
		-20	5-7 🗙			
Grades to grave	lly, sandy SILT.		S-8 🗙			
	·	-25	ə-a []		. 9 71/9	
Very dense, moi silly SAND.	st to wei, gray, gravelly	·	s-9 🗙			
· .		-35	5-10 X		• 50 <i>1</i> 5	.
1-fool-thick gra	vel layer.	1 E 1 ±40	S-11 ==		50/4	
Grades to slight	iy graveliy, silly SAND.	- - 45	S-12 🔀		50/3	
Grades to slight Very dense, moi	ly sandy, silty GRAVEL.		S-13 🛥		<b>e</b> 50/3	
gravelly, very si	Ity SAND.	-55	S~14 -		50/4	
		-60	S-15		● <b>5</b> 0/6	
	1010		<b>5</b> -16 <b>-</b>		50/3	
Bottom of Borin Completed 4/10,	g at 64 <b>.3 F ee</b> t. 199.					
						1
•		75				
•					20 50 100	Ľ
			••••	Water Content in Pa		
Refer to Figure A-2 and symbols,	for explanation of desc	riptions	• • •			
ana aynoona, Chirakaanadaana aa	d stratum lines are inter		•		HARTCRO	JVVSE

Figure A-7

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- Refer to Figure A-Z for explanation of descriptions and symbols,
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



and actual changes may be gradual.
Broundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

• .

Figure A-8

## **Test Hole Log TH-1**

Location: See Figure 2. Approximate Ground Surface Elevation: 113 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: Truck mounted 36"-inch-diameter auger Hammer Type: NA No casing used. Hole Diameter: 36 inches Logged By: P. Reed Reviewed By: J. Bingham





1. Refer to Figure A-1 for explanation of descriptions and symbols.

- Reter to Figure A- Fior explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
   USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## **Test Hole Log TH-1**

Location: See Figure 2. Approximate Ground Surface Elevation: 113 Feet Horizontal Datum: Vertical Datum: NAVD 88

Drill Equipment: Truck mounted 36"-inch-diameter auger Hammer Type: NA No casing used. Hole Diameter: 36 inches Logged By: P. Reed Reviewed By: J. Bingham

		Death		STAN	IDARD	ION RE	ESISTA	NCE	LAB TES
ICS Graphi	Soil Descriptions	Depth in Feet	Sample	▲ Blow					
-ML	Hard moist gray clayer SILT to silty CLAY	r <sup>25</sup>	<b>r</b> –1	<u>۴</u>	<u>10 ;</u>	<u>20 3</u>	<u>10 4</u>	<u>0 50</u>	<u>י+</u>
	Hard, moist, gray, clayey SILT to silty CLAY with some laminations. Harder drilling.			1 :	:	1:	1 :	:	ļļ
	(cont'd)	-		- : -	1 :	:	:	:	{ <b> </b> :
					1 :	1:	:	:	<b>!</b> {
	Density increases. Drill makes "sucking" noise and is difficult to remove.	E Contraction of the second se		Γ:	:	:	:	:	11
	noise and is difficult to remove.	<b>–</b>		L :	1 :	1	:	: :	<b>!</b> ]
					1	1	:	:	11
		-		- :	1	1 :	:	:	
	•			:	1 :	1:		:	ļļ
	·	—30		<u> </u>	+	1.			11
					1 :	1	:	:	!!
	· ·	F		Γ:	1 :	1 :	:	:	
		L		L :	1 :	1 :	:	:	<u>i</u>
						:	:	:	}
	Moisture content increases and color	F		+ :		:	:	:	11
	changes to olive gray.			1		1 :	:	:	
	Grades to slightly gravelly, sandy SILT.	F		h :	1 :	1:	:	:	
				:	1 :	1 :		:	<b>!!</b>
		-35		:	1 :	:	:	:	11
		·L	×		1 :	1	:	:	
				:	:	:	:	:	
7	Very dense to hard, moist, olive gray,	<b>F</b> .		+ :	1 :	:		:	ľ
	Very dense to hard, moist, olive gray, gravelly, silty SAND with cobbles up to 6 inches in diameter. (TILL-like) Drilling				1 :	1:	:	:	
	becomes increasingly difficult.	-		F :	1 :	1:			
				:	1:		: :	:	
		Γ		Γ:	1 :	1	:	:	
		-40		·	· ·	·	ŀ	•	Į
				:	] :	1	: .	:	
	•	-		- :	] :	1:		:	
				1 :	1 :	1:		:	
		F		F :	1 :	1:	:		
				:		1:	: 1	:	
		_[		Γ:	.  :	:		:	
	Bottom of Boring at 43.5 Feet.	-		- ÷		:	:	:	
	Started 10/16/07.			:		:		:	
	Completed 10/16/07.	-45		l ÷	+ :	+	<del>  : -  </del>	•	11
	No sloughing/caving noted. No groundwater				1	:		:	
	No sloughing/caving noted. No groundwater encountered.	F	.	F :	1	:		:	
		Ļ		L :		1 :		:	
			.					;	
		Ļ.		F :		:	:	:	
				:		1 :		:	
		F		F :	:	1:		:	
						1:		:	
		L50		0	20 er Conte	40 É	0 8	0 10	10+

 Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with the provided the specified. with time.

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17433-00 10/07 Figure A-9 2/2

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**APPENDIX B** 

Appendix B

SUMMARY OF SAMPLES AND ANALYTICAL RESULTS

### Table B-1 - Sample Location and Analysis Summary

						Anal	vses					
Sample ID	Collection Date	Location	Matrix	NWTPH-BTEX	NWTPH-Gx	NWTPH-Dx	VOCs	Metals (a)	Lead	Lab Invoice No.	(b)	Type of Sample
GRAB 1		Bottom of UST-1 approx. 5.5 feet bgs	Soil	X	X	х				A10517-2	а	Characterization
GRAB 2		Bottom of UST-1 approx. 5.5 feet bgs	Soil	x	x	x				A10517-2	b	Characterization
GS-S01	and the second	Bottom of UST-1 approx. 4 feet bgs	Soil	x	x	x				A10518-3	С	Characterization
GS-S03		North side wall of UST-1, approx. 4 feet bgs	Soil	x	x	x				A10518-3	d	Characterization
GS-S05		West side wall of UST-1, approx. 4 feet bgs	Soil	x	x	x				A10518-3	е	Characterization
GS-S07		South side wall of UST-1, approx. 4 feet bgs	Soil	x	x	x				A10518-3	f	Characterization
GS-S09		East side wall of UST-1, approx. 4 feet bgs	Soil	x	x	x				A10518-3	g	Characterization
GS-E01		North side wall of UST-1, approx. 4 feet bgs	Soil	x	x	x				A10518-3		Final
TP1-1	5/20/2011	Test Pit grab sample at 2 feet bgs	Soil	x	x	x				A10521-1		Final
TP1-2	5/20/2011	Test Pit grab sample at 5 feet bgs	Soil	x	x	х				A10521-1		Final
TP2-2	5/20/2011	Test Pit grab sample at 4 feet bgs	Soil	x	x	х				A10521-1		Final
TP3-1	5/20/2011	Test Pit grab sample at 2.5 feet bgs	Soil	x	x					A10521-1		Final
TP3-2	5/20/2011	Test Pit grab sample at 5 feet bgs	Soil	x	x	х				A10521-1		Final
TP4-2	5/20/2011	Test Pit grab sample at 4.5 feet bgs	Soil	x	x					A10521-1		Final
TP5-1	5/20/2011	Test Pit grab sample at 2.5 feet bgs	Soil	x	x					A10521-1		Final
TP6-1	5/20/2011	Test Pit grab sample at 2 feet bgs	Soil	x	x					A10521-1		Final
TP6-2	5/20/2011	Test Pit grab sample at 4.5 feet bgs	Soil		x	x	х		х	A10521-1		Final
TP7-2	5/20/2011	Test Pit grab sample at 6 feet bgs	Soil	x	x					A10521-1		Final
TP8-1	5/20/2011	Test Pit grab sample at 2.5 feet bgs	Soil	x	x					A10521-1		Final
TP9-1	5/20/2011	Test Pit grab sample at 4 feet bgs	Soil		x	x	х		х	A10521-1		Final
TP9-2	5/20/2011	Test Pit grab sample at 5.5 feet bgs	Soil		x	x	х	х		A10521-1	h	Characterization
TP10-1	5/20/2011	Test Pit grab sample at 5.5 feet bgs	Soil		x	x	х		х	A10521-1	i	Characterization
TP11-1	5/20/2011	Test Pit grab sample at 2.5 feet bgs	Soil	x	x	x				A10521-1		Final
TP12-1	5/20/2011	Test Pit grab sample at 3 feet bgs	Soil	X	x					A10521-1		Final
TP12-2	5/20/2011	Test Pit grab sample at 6 feet bgs	Soil	x	x	x			x	A10521-1		Final
TP13-1	5/20/2011	Test Pit grab sample at 4 feet bgs	Soil		x	x	х	х		A10521-1	j	Characterization
TP14-1		Test Pit grab sample at 4 feet bgs	Soil	x	x				x	A10521-1		Final
EX1		Bottom of UST-2 approx. 5 feet bgs	Soil	x	x	x		х		A10531-3	k	Characterization
EX3	5/27/2011	North side wall of UST-2 approx. 5 feet bgs	Soil			x				A10531-3		Final
EX5		West side wall of UST-2 approx. 5 feet bgs	Soil			x				A10531-3		Final
EX7	5/27/2011	Backfilled material, in place stockpile	Soil	x	х	х		х		A10531-3	1	Characterization

### Table B-1 - Sample Location and Analysis Summary

Sheet 2 of 3

					_	Anal	vses	6				
Sample ID	Collection Date	Location	Matrix	NWTPH-BTEX	NWTPH-Gx	H-Dx	VOCs	Metals (a)	Lead	Lab Invoice No.	(b)	Type of Sample
SW-1	6/2/2011	South side wall of excavation at approx. 3 feet bgs	Soil	x	х					A10603-1		Final
TP-15	6/2/2011	Test Pit grab sample at 4 feet bgs	Soil	x	x					A10603-1		Final
SW-2	6/2/2011	East side wall of excavation at approx. 2.5 feet bgs	Soil	x	x					A10603-1		Final
TP-16	6/2/2011	Test Pit grab sample at 6 feet bgs	Soil	x	x					A10603-1		Final
SW-3	6/2/2011	West side wall of excavation at approx. 5 feet bgs	Soil	x	x					A10603-1	7	Final
TP-17	6/2/2011	Test Pit grab sample at 4 feet bgs	Soil	x	x					A10603-1		Final
TP-18	6/2/2011	Test Pit grab sample at 3.5 feet bgs	Soil	x	x					A10603-1		Final
TP-19		Test Pit grab sample at 6 feet bgs	Soil	x	x					A10603-1		Final
TP-20	6/2/2011	Test Pit grab sample at 6 feet bgs	Soil	x	х					A10603-1		Final
TP-21		Test Pit grab sample at 6 feet bgs	Soil	x	х					A10603-1		Final
TP-22		Test Pit grab sample at 6 feet bgs	Soil	x	x					A10603-1		Final .
T1-1		UST-3 north end at approx. 7 feet bgs	Soil	x	х	x			х	A10603-3	m	Characterization
T1-2		UST-3 middle at approx. 7 feet bgs	Soil	x	x	x				A10603-3	n	Characterization
T1-3		UST-3 south end at approx. 7 feet bgs	Soil	x	x	x				A10603-3	0	Characterization
T2-1		UST-4 east end at approx. 7 feet bgs	Soil	x	x	x			х	A10603-3		Final
T2-2		UST-4 middle at approx. 7 feet bgs	Soil	x	x	x			х	A10603-3		Final
T2-3	6/3/2011	UST-4 west end at approx. 7 feet bgs	Soil	x	x	x			х	A10603-3		Final
T1-SP-1		UST-3 Stockpile sample	Soil	x	x	x			х	A10603-3	р	Characterization
T1-SP-2	6/3/2011	UST-3 Stockpile sample	Soil	x	x	x				A10603-3	q	Characterization
T1-SP-3	6/3/2011	UST-3 Stockpile sample	Soil	x	x	x			х	A10603-3	r	Characterization
E1-S1	6/8/2011	Pile E1 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
E1-S2		Pile E1 at 7-15 feet bgs	Soil	x	x					A10609-1		Final
E2-S1	6/8/2011	Pile E2 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
E2-S2		Pile E2 at 7-15 feet bgs	Soil	x	х					A10609-1		Final
E3-S1		Pile E3 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
E3-S2		Pile E3 at 7-15 feet bgs	Soil	x	x					A10609-1		Final
E4-S1	6/8/2011	Pile E4 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
N24-S1		Pile N21 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
N23-S1	6/8/2011	Pile N20 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
N22-S1		Pile N19 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
N22-S2	6/8/2011	Pile N19 at 7-15 feet bgs	Soil	x	x					A10609-1	· · · · · · · · · · · · · · · · · · ·	Final

### Table B-1 - Sample Location and Analysis Summary

Sheet 3 of 3

						Anal	yses	3				
Sample ID	Collection Date	Location	Matrix	NWTPH-BTEX	NWTPH-Gx	NWTPH-Dx	vocs	Metals (a)	Lead	Lab Invoice No.	(b)	Type of Sample
N20-S1	6/8/2011	Pile N17 at 0-7 feet bgs	Soil	x	x					A10609-1		Final
N21-S1	6/8/2011	Pile N18 at 7-15 feet bgs	Soil	x	x					A10609-1	S	Characterization
SP1-S1	6/8/2011	UST-3 and UST-4 Stockpile sample	Soil	x	x					A10609-1	С	Characterization
SP1-S2	6/8/2011	UST-3 and UST-4 Stockpile sample	Soil	x	x					A10609-1	с	Characterization
SP1-S3	6/8/2011	UST-3 and UST-4 Stockpile sample	Soil	x	x					A10609-1	С	Characterization
SP1-S4		UST-3 and UST-4 Stockpile sample	Soil	x	x					A10609-1	С	Characterization
T5-1		UST-5 south end at approx. 8 feet bgs	Soil	x	x	x			х	A10616-6		Final
T5-2		UST-5 bottom at approx. 8 feet bgs	Soil	x	x	x			х	A10616-6	t	Characterization
T5-3		UST-5 north end at approx. 8 feet bgs	Soil	x	x	x			х	A10616-6	u	Characterization
TP-23		Test Pit grab sample at 8 feet bgs (elevation 104 feet)	Soil	x	x		5			A10617-1		Final
TP-24		Test Pit grab sample at 11 feet bgs (elevation 101 feet)	Soil	x	x					A10617-1		Final
TP-25		Test Pit grab sample at 6 feet bgs (elevation 106 feet)	Soil	x	x					A10617-1		Final
TP-26	6/16/2011	Test Pit grab sample at 6 feet bgs (elevation 106 feet)	Soil	X	x					A10617-1		Final
SP-1S		UST-5 Stockpile sample	Soil	X	X					A10617-1	С	Characterization
TP-27		Test Pit grab sample at 11 feet bgs (elevation 101 feet)	Soil	x	x					A10620-1		Final
TP-28	6/20/2011	Test Pit grab sample at 11.5 feet bgs (elevation 101.5 feet)	Soil	x	x					A10620-1		Final
		Total	Analyses	71	76	35	5	4	14			

Notes:

(a) Metal analytes include Pb, Cr, Cd, As, Hg, Cu, Ni, and Zn.

E - East

EX - Excavation

GS - Grab Sample

N - North

S - Soil

SP - Stockpile SW - side wall

T - Tank

TP - Test Pit

(b) Characterization Sample Designation with MTCA Method A Cleanup Level Exceedance (Over excavated with Off-Site Disposal)

(c) Stockpile Characterization Sample

Table B-2 - Analytical	Results f	or Characte	erization Soil S	Samples				Sheet 1 of 6
Sample ID	MTCA	Grab 1	Grab 2	GS-S01	GS-S03	00.005	00.007	
Sampling Date	Method A	5/16/11	5/16/11	5/18/11	5/18/11	GS-S05 5/18/11	GS-S07	GS-S09
Sample Depth in Feet	Cleanup Level	5.5	5.5	4	4	4	5/18/11 4	5/18/11 . 4
Moisture in %	LOVE	38%	40%	24%	22%	15%	22%	20%
NWTPH-Gx in mg/kg								
Mineral spirits/Stoddard	100/30 <sup>a</sup> .	5.0 U	5.0 U ·	5.0 U	5.0 U	5.0 U	50.0	50.11
Gasoline	100/30 <sup>a</sup>	590	84	230	3.0 0	14	5.0 U	5.0 U <b>35</b>
BTEX 8021B in µg/kg								
Benzene	30	12,000	3,400	3,200	1,400	97		
Toluene	7000	23,000	2,900	5,000	1,800	190	2,200 3,500	800
Ethylbenzene	6000	10,000	550	2,100	240	50 U	510	1,300
Xylenes .	9000	32,000	2,100	6,300	1,300	140	2,700	200 800
NWTPH-Dx in mg/kg					• •			
Kerosene/Jet fuel	2000	20 U	20 U	20 U	20 U	20 U	20 U	20.11
Diesel/Fuel oil	2000	20 U	20 U	25	20 U	20 U 20 U	20 U 20 U	20 U 20 U
Heavy oil	2000	50 U	50 U	50 U	50 U	50 U	20 U 50 U	20 U 50 U
Metals in mg/kg								
Lead (Pb)	250							
Chromium (Cr)	2000							
Cadmium (Cd)	2							
Arsenic (As)	20				•			
Mercury (Hg) (7471)	2							
Copper (Cu)								
Nickel (Ni) Zinc (Zn)								

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able B-2 - Analytic	EX1	EX7	T1-1	T1-2	<b>T4</b> 0	T4 0D 4	74.05.0	Sheet 2 of
Sampling Date	5/27/11	5/27/11	6/3/11		T1-3	T1-SP-1	T1-SP-2	
Sample Depth in Feet	5	5/2/11	7	6/3/11 7	6/3/11 7	6/3/11 ·	6/3/11	
Noisture in %	27%	18%	16%	14%	17%	17%	19%	
WTPH-Gx in mg/kg					ر			
Mineral spirits/Stoddard	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Gasoline	140	41	120	37	49	1,500	280	
3TEX 8021B in µg/kg								
Benzene	20 U	20 U	1,300	260	310	12,000	930	
Toluene	240	220	1,000	140	230	21,000	1,700	
Ethylbenzene	610	250	2,200	530	790	23,000	3,200	
Xylenes	1,200	570	2,900	590	1,000	64,000	4,100	
WTPH-Dx in mg/kg								
Kerosene/Jet fuel	20 U	20 U	20 U	20 U	20 U	20 U	20 U	
Diesel/Fuel oil	3,400	57	20 U	20 U	20 U	20 U	20 U	
Heavy oil	50 U	50 U	50 U	50 U	50 U	50 U	. 50 U	
Metals in mg/kg								
Lead (Pb)	5.7	11	11 J			<b>25</b> J		
Chromium (Cr)	2.0 U	2.3						
Cadmium (Cd)	1.0 U	1.0 U						
Arsenic (As)	2.0 U	2.3						
Mercury (Hg) (7471)	0.5 U	0.5 U						
Copper (Cu)	20	24						
Nickel (Ni)	15	20						
Zinc (Zn)	29	27						

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Table B-2 - Analytica	I Results for	<sup>-</sup> Characteriza	ation Soil Sar	nples				Sheet 3 of 6
Sample ID Sampling Date Sample Depth in Feet	T1-SP-3 6/3/11	N21-S1 6/8/11 7 to 15	SP1-S1 6/8/11	SP1-S2 6/8/11	SP1-S3 6/8/11	SP1-S4 6/8/11	T5-2 6/16/11 8	T5-3 6/16/11 8
Moisture in %	16%	16%	19%	18%	16%	14%	24%	20%
NWTPH-Gx in mg/kg				•				
Mineral spirits/Stoddard	<u> </u>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	830	5.0 U	5.0 U	5.0 U	5.0 U .	5.0 U	5.0 U	5.0 U
BTEX 8021B in µg/kg								
Benzene	8,700	320	20 U	20 U	20 U	20 U	79	230
Toluene	11,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Ethylbenzene	12,000	50 U	50 U	· 50 U	50 U	50 U	50 U	50 U
Xylenes	30,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U
NWTPH-Dx in mg/kg								
Kerosene/Jet fuel	20 U				•		20 U	20 U
Diesel/Fuel oil	20 U						20 U	20 U
Heavy oil	50 U						50 U	50 U
Metals in mg/kg						,		
Lead (Pb) Chromium (Cr) Cadmium (Cd) Arsenic (As) Mercury (Hg) (7471) Copper (Cu) Nickel (Ni) Zinc (Zn)	15 J						5.1	4.2

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Table B-2 - Analytica	l Results fo	r Characteriz	ation Soil Sa	mples	
Sample ID	SP-1S	TP9-2	TP10-1	TP13-1	
Sampling Date	6/17/11	5/20/11	5/20/11	5/20/11	
Sample Depth in Feet		5.5	5.5	4	
Moisture in %	17%	15%	12%	14%	
NWTPH-Gx in mg/kg					
Mineral spirits/Stoddard	5.0 U	5.0 U	5.0 U	5.0 U	
Gasoline	5.0 U	5.0 U	5.0 U	12	
BTEX 8021B in µg/kg					
Benzene	20 U			-	
Toluene	50 U				
Ethylbenzene	່ 50 U				
Xylenes	50 U		'n		
NWTPH-Dx in mg/kg					
Kerosene/Jet fuel		20 U	20 U	20 U	
Diesel/Fuel oil		20 U	20 U	20 U	
Heavy oil		50 U	50 U	50 U	
Metals in mg/kg		,			
Lead (Pb)		7.1	12	3.8	
Chromium (Cr)		3.9		2.2	
Cadmium (Cd)		1.0 U		1.0 U	
Arsenic (As)		2.0 U		2.0 U	
Mercury (Hg) (7471)		0.5 U		0.5 U	
Copper (Cu)		28		23	
Nickel (Ni)	_	13		8.5	
Zinc (Zn)	-	51		49	

Sheet 4 of 6

50 U 50 U 12 3.8 2.2 1.0 U 2.0 U

a) 100 mg/kg for gasoline mixtures without benzene and total of ethylbenzene, toluene, xylenes are less than 1% of gasoline mixture; 30 mg/kg for all other gasoline mixtures.

U = Not detected at detection limit indicated.

J = Estimated value.

Concentrations that exceed cleanup level are bolded and boxed.

Detected concentrations are bolded.

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## Table B-2 - Analytical Results for Characterization Soil Samples

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1,3,5-Trimethylbenzene

TP13-1 TP9-2 **TP10-1** MTCA Sample ID 5/20/11 5/20/11 · Method A 5/20/11 Sampling Date 4.0 5.5 Sample Depth in Feet Cleanup 5.5 Level Volatiles (8260B) in ug/kg 50 U 50 U 50 U 100 MTBE 50 U 50 U 50 U Dichlorodifluoromethane 50 U 50 U 50 U Chloromethane 50 U 50 U 50 U Vinyl chloride 50 U 50 U 50 U Bromomethane 50 U 50 U 50 U Chloroethane 50 U 50 U 50 U Trichlorofluoromethane 50 U 50 U 50 U 1,1-Dichloroethene 20 U 20 U 20 U 20 Methylene chloride 50 U 50 U 50 U trans-1,2-Dichloroethene 50 U 50 U 50 U 1.1-Dichloroethane 50 U 50 U 50 U 2.2-Dichloropropane 50 U 50 U 50 U cis-1,2-Dichloroethene 50 U 50 U 50 U .Chloroform 50 U 50 U 2000 50 U 1.1.1-Trichloroethane 50 U 50 U 50 U Carbon tetrachloride 50 U 50 U 50 U 1,1-Dichloropropene 290 120 140 30 Benzene 20 U 20 U 20 U 1.2-Dichloroethane(EDC) 20 U 20 U 30 20 U Trichloroethene ~ 50 U 50 U 50 U 1.2-Dichloropropane 50 U 50 U 50 U Dibromomethane 50 U 50 U 50 U Bromodichloromethane 50 U 50 U 50 U cis-1,3-Dichloropropene 64 7000 59 50 U Toluene 50 U 50 U 50 U trans-1,3-Dichloropropene 50 U 50 U 50 U 1,1,2-Trichloroethane 50 U 50 50 U 50 U Tetrachloroethene 50 U 50 U 50 U 1,3-Dichloropropane 20 U 20 U 20 U Dibromochloromethane 5 U 5 U 1,2-Dibromoethane (EDB)\* 5 5 U 50 U 50 U 50 U Chlorobenzene 50 U 50 U 50 U 1,1,1,2-Tetrachloroethane 50 U 120 6000 50 U Ethylbenzene 140 50 U 9000 50 U **Xylenes** 50 U 50 U 50 U Styrene 50 U 50 U 50 U Bromoform 50 U 50 U 50 U Isopropylbenzene 50 U 50 U 50 U 1,2,3-Trichloropropane 50 U 50 U 50 U Bromobenzene 50 U 50 U 50 U 1,1,2,2-Tetrachloroethane 50 U 50 U 50 U n-Propylbenzene 50 U 50 U 50 U 2-Chlorotoluene 50 U 50 U 50 U 4-Chlorotoluene

50 U

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50 U

50 U

## Table B-2 - Analytical Results for Characterization Soil Samples

Sample ID	MTCA	TP9-2	TP10-1	TP13-1
Sampling Date	Method A	5/20/11	5/20/11	5/20/11
Sample Depth in Feet	Cleanup	5.5	5.5	4.0
	Level			
tert-Butylbenzene		50 U	50 U	50 U
1,2,4-Trimethylbenzene		50 U	50 U	50 U
sec-Butylbenzene		50 U	. 50 U	50 U
1,3-Dichlorobenzene		50 U	50 U	50 U
Isopropyltoluene		50 U	50 U	50 U
1,4-Dichlorobenzene		50 U	50 U	50 U
1,2-Dichlorobenzene		50 U	50 U	50 U
n-Butylbenzene		50 U	50 U	50 U
1,2-Dibromo-3-Chloropropane		50 U	50 U	50 U
1,2,4-Trichlorobenzene		50 U	50 U	50 U
Hexachloro-1,3-butadiene		50 U	50 U	50 U
Naphtahlene	5000	50 U	50 U	50 U
1,2,3-Trichlorobenzene		50 U	50 U	50 U
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U = Not detected at detection limit indicated.

J = Estimated value.

Concentrations that exceed cleanup level are bolded and boxed. Detected concentrations are bolded.

Fable B-3 - Analytical           Sample ID	MTCA		TP1-1	TP1-2	TP2-2			Sheet 1 of
Sampling Date	Method A		5/20/11	5/20/11		TP3-1	TP3-2	TP4-2
Sample Depth in Feet	Cleanup Level	4	2	5/20/11	5/20/11 4	5/20/11 2.5	5/20/11 5	5/20/11 4.5
Moisture in %		22%	16%	20%	20%	15%	22%	23%
NWTPH-Gx in mg/kg						-		20,0
-Mineral spirits/Stoddard	100/30 <sup>ª</sup>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5011	50.11
Gasoline	100/30 <sup>a</sup>	14	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U 5.0 U	5.0 U 5.0 U
BTEX 8021B in µg/kg								
Benzene	30	20 U	20 U	20 U	20 U	20 U	20 U	
Toluene	7000	220	50 U	50 U	50 U	50 U	20 U 50 U	20 U
Ethylbenzene	6000	50 U	50 U	50 U	50 U	50 U	50 U 50 U	50 U
Xylenes	9000	55	50 U	50 U	50 U	50 U ·	50 U	50 U 50 U
NWTPH-Dx in mg/kg						•		
Kerosene/Jet fuel	2000	20 U	20 U	20 U	20 U	•	. 20 U	
Diesel/Fuel oil	2000	20 U	20 U	20 U	20 U		_ 20 U 20 U	
Heavy oil	2000	50 U	50 U	50 U	50 U		50 U	
Metals in mg/kg								
Lead (Pb)	250							
Chromium (Cr)	2000							
Cadmium (Cd)	2							
Arsenic (As)	20							
Mercury (Hg) (7471)	2	•						
Copper (Cu)								
Nickel (Ni) Zinc (Zn)								

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Sample ID	TP5-1	r Final Verific TP6-1	TP6-2	TP7-2	TP8-1	TP9-1		Sheet 2 of 9
Sampling Date	5/20/11	5/20/11	5/20/11	5/20/11	5/20/11	5/20/11	TP11-1 5/20/11	TP12-1
Sample Depth in Feet	2.5	2	4.5	6	2.5	4	2.5	5/20/11 3
Moisture in %	22%	14%	12%	21%	22%	25%	20%	21%
NWTPH-Gx in mg/kg								
Mineral spirits/Stoddard	5.0 U	5.0 U	5.0 U	5.0 Ú	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BTEX 8021B in µg/kg			:				· ·	
Benzene	20 U	20 U		20 U	20 U		20 U	20 U
Toluene	50 U	50 U		89	88		20 U	20 U 50 U
Ethylbenzene	50 U	50 U		50 U	50 U		50 U	50 U 50 U
Xylenes	50 U	50 U		50 U	50 U		50 U	50 U
NWTPH-Dx in mg/kg					- 1			
Kerosene/Jet fuel	•		20 U			20 U	20 U	
Diesel/Fuel oil			20 U			20 U	20 U 20 U	
Heavy oil			50 U			50 U	20 U 50 U	
Metals in mg/kg	•							
Lead (Pb)			22			13		
Chromium (Cr)								
Cadmium (Cd)		,						
Àrsenic (As)						1		
Mercury (Hg) (7471)								
Copper (Cu)								
Nickel (Ni)								
Zinc (Zn)								

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Sample ID	TP12-2	TP14-1	EX3	EX5	SW-1	TP-15	SW-2	TP-16
Sampling Date	5/20/11	5/20/11	5/27/11	5/27/11	6/2/11	6/2/11	6/2/11	6/2/11
Sample Depth in Feet	6	4	5	5	3	4 .	2.5	6
Moisture in %	22%	22%	19%	20%	23%	21%	22%	19%
NWTPH-Gx in mg/kg								
Mineral spirits/Stoddard	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U	5.0 U
BTEX 8021B in µg/kg								
Benzene	20 U	20 U	-		20 U	20 U	20 U	20 U
Toluene	50 U	50 U			50 U	50 U	50 U	50 U
Ethylbenzene	50 U	50 U			50 U	50 U	50 U	50 U
Xylenes	50 U	50 U			50 U	50 U	50 U	50 U
NWTPH-Dx in mg/kg								
Kerosene/Jet fuel	20 U		20 U	20 U				
Diesel/Fuel oil	20 U		20 U	20 U				
Heavy oil	50 U		50 U	50 U				
Metals in mg/kg								
Lead (Pb) Chromium (Cr)	9.0	6.6						
Cadmium (Cd) Arsenic (As)							, -	
Mercury (Hg) (7471)								
Copper (Cu)								
Nickel (Ni) Zinc (Zn)								

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Sample ID	SW-3	TP-17	TP-18	TP-19	ŢP-20	TP-21	TP-22	<sup>-</sup> T2-1
Sampling Date	6/2/11	6/2/11	6/2/11	6/2/11	6/2/11	6/2/11	6/2/11	6/3/11
Sample Depth in Feet	. 5	4	3.5	6	6	6	6	7
Moisture in %	23%	20%	16%	23%	20%	17%	22%	15%
NWTPH-Gx in mg/kg								
Mineral spirits/Stoddard	5.0 U							
Gasoline	5.0 U	5.9						
BTEX 8021B in µg/kg								
Benzene	20 U							
Toluene	50 U	71						
Ethylbenzene	50 U							
Xylenes	50 U	97						
NWTPH-Dx in mg/kg					· · ·	•		
Kerosene/Jet fuel			-	•				20 U
Diesel/Fuel oil		•						20 U
Heavy oil								50 U
Metals in mg/kg								
Lead (Pb)								<b>52</b> J
Chromium (Cr)								
Cadmium (Cd)								
Arsenic (As)								
Mercury (Hg) (7471)								
Copper (Cu)								
Nickel (Ni)					,			
Zinc (Zn)								

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Sample ID	T2-2	T2-3	ation Soil Sa E1-S1	E1-S2	E2-S1	E2-S2	F2 04	Sheet 5 of 9
Sampling Date	6/3/11	6/3/11	6/8/11	6/8/11	6/8/11	6/8/11	E3-S1	E3-S2
Sample Depth in Feet	7	7	6 to 7	7 to 15	0 to 7	7 to 15	6/8/11 0 to 7	6/8/11 7 to 15
Moisture in %	15%	16%	23%	26%	21%	18%	21%	16%
NWTPH-Gx in mg/kg			,					
Mineral spirits/Stoddard	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	໌ 5.0 U
Gasoline	5.0 U	5.0 U	12	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U 5.0 U
BTEX 8021B in µg/kg								
Benzene	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Toluene	50 U	50 U	· 50 U	50 U	50 U	50 U	20 U 50 U	
Ethylbenzene	50 U	- 50 U	50 U	50 U	50 U	50 U	50 U	50 U
Xylenes	50 U	50 U	84	50 U	50 U	50 U	50 U	50 U 50 U
NWTPH-Dx in mg/kg								
Kerosene/Jet fuel	20 U	20 U		•				
Diesel/Fuel oil	20 U	20 U						
Heavy oil	50 U	50 U						
Metals in mg/kg								
Lead (Pb) Chromium (Cr) Cadmium (Cd) Arsenic (As)	<b>22</b> J	7.3 J						
Mercury (Hg) (7471) Copper (Cu) Nickel (Ni) Zinc (Zn)						· .		

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Table B-3 - Analytical Sample ID	E4-S1	N24-S1	N23-S1	N22-S1	N22-S2	N00 C4		<b>TD:</b> 0.0
Sampling Date	6/8/11	6/8/11	6/8/11	6/8/11	6/8/11	N20-S1 6/8/11	· T5-1	TP-23
Sample Depth in Feet	0 to 7	0 to 7	0 to 7	0 to 7	7 to 15	0 to 7	6/16/11 8	6/16/11 8
Moisture in %	21%	22%	21%	17%	19%	19%	. 22%	22%
NWTPH-Gx in mg/kg		•						
Mineral spirits/Stoddard	5.0 U	5.0 U	、 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Gasoline	5.0 U	<b>13</b>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BTEX 8021B in µg/kg								
Benzene	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Toluene	50 U ์	50 U	50 U	50 U	50 U	50 U	50 U	20 U 50 U
Ethylbenzene	50 U	70	50 U	50 U	50 U	50 U	50 U	50 U
Xylenes	<b>50 U</b> .	100	50 U	50 U	- 50 U	50 U	50 U	50 U
NWTPH-Dx in mg/kg								
Kerosene/Jet fuel							20 U	
Diesel/Fuel oil						•	20 U	
Heavy oil							50 U	
Metals in mg/kg								
Lead (Pb) Chromium (Cr)							6.2	
Cadmium (Cd)								
Arsenic (As)		• .						
Mercury (Hg) (7471)								
Copper (Cu)								
Nickel (Ni)		-	•					
Zinc (Zn)	u l				-			

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## Table B-3 - Analytical Results for Final Verification Soil Samples

Sample ID	TP-24	TP-25	TP-26	TP-27	TP-28
Sampling Date	6/16/11	6/16/11	6/16/11	6/20/11	6/20/11
Sample Depth in Feet	11	6	6	9	9.5
Moisture in %	16%	21%	23%	22%	21%
NWTPH-Gx in mg/kg					
Mineral spirits/Stoddard	5.0 U				
Gasoline	5.0 U				
BTEX 8021B in µg/kg					
Benzene	20 U				
Toluene	50 U				
Ethylbenzene	50 U				
Xylenes	50 U				

### NWTPH-Dx in mg/kg

Kerosene/Jet fuel Diesel/Fuel oil Heavy oil

### Metals in mg/kg

Lead (Pb) Chromium (Cr) Cadmium (Cd) Arsenic (As) Mercury (Hg) (7471) Copper (Cu) Nickel (Ni) Zinc (Zn)

> a) 100 mg/kg for gasoline mixtures without benzene and total of ethylbenzene, toluene, xylenes are less than 1% of gasoline mixture; 30 mg/kg for all other gasoline mixtures.

U = Not detected at detection limit indicated.

J = Estimated value.

Concentrations that exceed cleanup level are bolded and boxed. Detected concentrations are bolded.

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Sheet 7 of 9

## Table B-3 - Analytical Results for Final Verification Soil Samples

Table D-5 - Analytical K			-
Sample ID	MTCA	TP6-2	TP9-1
Sampling Date	Method A		5/20/11
Sample Depth in Feet	Cleanup	4.5	4.0
	Level		
Volatiles (8260B) in ug/kg			
MTBE	<u>100 </u>	50 U	50 U
Dichlorodifluoromethane		50 U	50 U
Chloromethane		50 U	50 U
Vinyl chloride		50 U	50 U
Bromomethane		50 U	50 U
Chloroethane		50 U	50 U
Trichlorofluoromethane		50 U	50 U
1,1-Dichloroethene		50 U	50 U
Methylene chloride	20	20 U	20 U
trans-1,2-Dichloroethene		50 U	50 U
1,1-Dichloroethane		50 U	50 U
2,2-Dichloropropane		50 U	50 U
cis-1,2-Dichloroethene		50 U	50 U
Chloroform	<b>,</b>	50 U	50 U
1,1,1-Trichloroethane	2000	50 U	50 U
Carbon tetrachloride		50 U	50 U
1,1-Dichloropropene		50 U	50 U
Benzene	30	·20 U	20 U
1,2-Dichloroethane(EDC)		20 U	20 U
Trichloroethene	30	20 U	20 U
1,2-Dichloropropane	00	50 U	50 U
Dibromomethane		50 U	50 U
Bromodichloromethane		50 U	50 U
cis-1,3-Dichloropropene		50 U	50 U
Toluene	7000	56	50 U
trans-1,3-Dichloropropene	1000	50 U	50 U
1,1,2-Trichloroethane		50 U	50 U
Tetrachloroethene	50	50 U	50 U
1,3-Dichloropropane	00	50 U	50 U
Dibromochloromethane		20 U	20 U
1,2-Dibromoethane (EDB)*	5	20 U	5 U
Chlorobenzene	5	50 U ·	50 U
1,1,1,2-Tetrachloroethane		50 U	50 U
Ethylbenzene	6000	50 U	50 U
Xylenes	9000	50 U	50 U
Styrene	0000	50 U	50 U
Bromoform		50 U	50 U
Isopropylbenzene		50 U	50 U
1,2,3-Trichloropropane	1	50 U	50 U
Bromobenzene		50 U	50 U
1,1,2,2-Tetrachloroethane		50 U	50 U
n-Propylbenzene		240	50 U
2-Chlorotoluene		240 50 U	50 U
4-Chlorotoluene	· ·	50 U 50 U	50 U 50 U
1,3,5-Trimethylbenzene		50 U 50 U	50 U
1,5,5-mineuryibenzene		50 U	50 U

Sheet 8 of 9

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## Table B-3 - Analytical Results for Final Verification Soil Samples

Sample ID	MTCA	TP6-2	TP9-1
Sampling Date	Method A	5/20/11	5/20/11
Sample Depth in Feet	Cleanup	4.5	4.0
	Level		
tert-Butylbenzene		50 U	50 U
1,2,4-Trimethylbenzene		50 U	50 U
sec-Butylbenzene		80	50 U
1,3-Dichlorobenzene		50 U	50 U
Isopropyltoluene		50 U	50 U
1,4-Dichlorobenzene		50 U	50 U
1,2-Dichlorobenzene		50 U	50 U
n-Butylbenzene		300	50 U
1,2-Dibromo-3-Chloropropane		50 U	50 U
1,2,4-Trichlorobenzene		50 U	50 U
Hexachloro-1,3-butadiene		50 U	50 U
Naphtahlene	5000	50 U	50 U
1,2,3-Trichlorobenzene		50 U	50 U

U = Not detected at detection limit indicated.

J = Estimated value.

Concentrations that exceed cleanup level are bolded and boxed. Detected concentrations are bolded.

Table B-4 - Analytical Results for Previous Soil Samples (Hart Crowser 2006c)											Sheet 1 of 4
Sample ID Depth in Feet	MTCA Method A Cleanup Leve	SP1-S2 1 to 4	SP1-S5 11 to 13	SP2-S1 0 to 4	SP3-S1 0 to 4	SP4-S2 4 to 7	SP5-S1 0 to 2	SP5-S2 2 to 7	SP5-S3 7 to 10	SP5-S4 10 to 13	SP6-S2 4 to 7
NWTPH-Gx in mg/kg											
Mineral spirits/Stoddard	100	5.0 U		5.0 U			5.0 U	7.6	5.0 U	5011	FOU
Gasoline	100/30(d)	5.0 U		5.0 U			5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
NWTPH-Dx in mg/kg							0.00	5.00	5.0 0	5.0 U	5.0 U
Kerosene/Jet fuel		20 U	20 U		20 U	20 U		20 U	20 U		
Diesel/Fuel oil	2000	20 U	20 U		20 U	20 U		20 U	20 U 20 U		
Heavy oil	2000	50 U	50 U		50 U	50 U		20 U 50 U	20 U 50 U		
Total Metals in mg/kg						000		50.0	50 U		
Lead	250		19					18	•		
Chromium	19/2,000(a)		24.0					26.0	,		
Cadmium	2		1.0 U					1.0 U			
Arsenic	20		2.1					2.1			
Mercury	2		0.5 U					0.5 U			
Copper	3000(b)		120					100			
Nickel			62.0					61.0			
Zinc	24000(b)		600					600			·

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# Table B-4 - Analytical Results for Previous Soil Samples (Hart Crowser 2006c)

Sample ID SP6-S3 MTCA SP7-S1 SP8-S2 SP9-S2 Depth in Feet Method A 7 to 11 0 to 4 4 to 7 4 to 7 Cleanup Lev NWTPH-Gx in mg/kg Mineral spirits/Stoddard 100 5.0 U 5.0 U Gasoline 100/30(d) 5.0 U 5.0 U NWTPH-Dx in mg/kg Kerosene/Jet fuel 20 U 20 U 20 U Diesel/Fuel oil 2000 20 U 20 U 20 U Heavy oil 2000 50 U 50 U 50 U Total Metals in mg/kg Lead 250 15 Chromium 19/2,000(a) 12 Cadmium 2 1.0 U Arsenic 20 6.4 Mercury 2 0.5 U Copper 3000(b) 82 Nickel 91 Zinc 24000(b) 900

Sheet 2 of 4

# Table B-4 - Analytical Results for Previous Soil Samples (Hart Crowser 2006c)

Sheet 3 of 4

					/				011001 0 01 4
Sample ID Depth in Feet	MTCA Method A Cleanup Level	SP1-S2 1 to 4	SP1-S5 11 to 13	SP2-S1 0 to 4	SP3-S1 0 to 4	SP4-S2 4 to 7	SP5-S1 0 to 2	SP5-S2 2 to 7	SP5-S3 7 to 10
Volatiles(8260) in µg/kg									
Dichlorodifluoromethane			50 U	50 U		50 U	50 U	50.11	
Chloromethane			50 U	50 U		50 U	50 U	50 U	50 U
Vinyl Chloride			50 U	50 U		50 U	50 U	50 U	50 U
Bromomethane			50 U	50 U		50 U	50 U	50 U	50 U
Chloroethane			50 U	50 U		50 U		50 U	50 U
Trichlorofluoromethane			50 U	50 U		50 U	50 U	50 U	50 U
1,1-Dichloroethene			50 U	50 U		50 U	50 U	50 U	50 U
Methylene Chloride	20		20 U	20 U			50 U	50 U	50 U
Trans-1,2-Dichloroethene	20		50 U	20 U		20 U	20 U	20 U	20 U
1,1-Dichloroethane			50 U	50 U		50 U	50 U	50 U	50 U
2,2-Dichloropropene			50 U	50 U		50 U	50 U	50 U	50 U
Cis-1,2-Dichloroethene			50 U	50 U		50 U	50 U	50 U	50 U
Chloroform			50 U	50 U		50 U	50 U	50 U	50 U
1,1,1-Trichloroethane	2,000		50 U	50 U		50 U	50 U	50 U	50 U
Carbon Tetrachloride	2,000		50 U	50 U		50 U	50 U	50 U	50 U
1,1-Dichloropropene			50 U	50 U		50 U	50 U	50 U	50 U
Benzene	30		50 U	50 U		50 U	50 U	50 U	50 U
1,2-Dichloroethane(EDC)	50		20 U			50 U	50 U	50 U	50 U
Trichloroethene	30		20 U	20 U		20 U	20 U	20 U	20 U
1,2-Dichloropropane	50		20 U	20 U		20 U	20 U	20 U	20 U
Dibromomethane			50 U	50 U		50 U	50 U	50 U	50 U
Bromodichloromethane	16,100(c)			50 U		50 U	50 U	50 U	50 U
Cis-1,3-Dichloropropene	10,100(0)		50 U	50 U		50 U	50 U	50 U	50 U
Toluene	7,000		50 U	50 U		50 U	50 U	50 U	50 U
Trans-1,3-Dichloropropene	17,500(c)		50 U	50 U		50 U	50 U	50 U	50 U
1,1,2-Trichloroethane	17,500(0)		50 U	50 U		50 U	50 U	50 U	50 U
Tetrachloroethene	50		50 U	50 U		50 U	50 U	50 U	50 U
1,3-Dichloropropane	50		50 U	50 U		50 U	50 U	50 U	50 U
Dibromochloromethane	5		50 U	50 U		50 U	50 U	50 U	50 U
1,2-Dibromoethane(EDB)	5		20 U	20 U		20 U	20 U	20 U	20 U
Chlorobenzene	5		5 U	5 U		5 U	5 U	5 U	5 U
1,1,1,2-Tetrachloroethane	22 200		50 U	50 U		50 U	50 U	50 U	50 U
Ethylbenzene	33,300		50 U	50 U		50 U	50 U	50 U	50 U
	6,000		50 U	50 U		50 U	50 U	59	50 U

Sample ID	MTCA	SP1-S2	SP1-S5	SP2-S1	SP3-S1	SP4-S2	SP5-S1	0.00	000 00
Depth in Feet	Method A	1 to 4	11 to 13	0 to 4	0 to 4	4 to 7	0 to 2	SP5-S2	SP5-S3
	Cleanup Level			0.00 4	0104	4107	0 10 2	2 to 7	7 to 10
Xylene	9,000		50 U	50 U		50 U	50 U	400	50.11
Styrene			50 U	50 U		50 U		120	50 U
Bromoform			50 U	50 U		50 U	50 U 50 U	50 U	50 U
Isopropylbenzene			50 U	50 U		50 U		50 U	50 U
1,2,3-Trichloropropane	3,200,000(c)		50 U	50 U			50 U	50 U	50 U
Bromobenzene	,		50 U	50 U		50 U	50 U	50 U	50 U
1,1,2,2-Tetrachloroethane	1,600,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
n-Propylbenzene	4,000,000(c)		50 U			50 U	50 U	50 U	50 U
2-Chlorotoluene	-3,200,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
4-Chlorotoluene	4,000,000(c)			50 U		50 U	-50 U	50 U	50 U
1,3,5-Trimethylbenzene			50 U	50 U		50 U	50 U	50 U	50 U
tert-Butylbenzene	3,200,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
-	4 000 000( )		50 U	50 U		50 U	50 U	50 U	50 U
1,2,4-Trimethylbenzene	4,000,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
sec-Butylbenzene			50 U	50 U		50 U	50 U	50 U	50 U
1,3-Dichlorobenzene			50 U	50 U		50 U	50 U	50 U	50 U
Isopropyltoluene	3,200,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
1,4-Dichlorobenzene			50 U	50 U		50 U	50 U	50 U	50 U
1,2-Dichlorobenzene	800,000(c)		50 U	50 U		50 U	- 50 U	50 U	50 U
n-Butylbenzene			50 U	50 U		50 U	50 U	50 U	50 U
1,2-Dibromo-3-Chloropropane	5,000		50 U	50 U		50 U	50 U	50 U	50 U
1,2,4-Trichlorobenzene	4,000,000(c)		50 U	50 U		50 U	50 U	50 U	50 U
Hexachloro-1,3-butadiene			50 U	50 U		50 U	50 U	50 U	50 U
Naphthalene	500		50 U	50 U		50 U	50 U	50 U 50 U	
1,2,3-Trichlorobenzene			50 U	50 U		50 U	50 U	50 U 50 U	50 U 50 U

Sample analysis conducted by Advanced Analytical Laboratory (Redmond, WA).

Detected concentrations are bolded.

Table D 4

Concentrations that exceed the screening criteria are boxed.

U = Not detected at detection limit indicated.

Blank indicates sample not analyzed for specific analyte or no MTCA cleanup level established.

(a) MTCA Method A cleanup level for chromium VI is 19. MTCA Method A cleanup level for chromium III is 2,000 mg/kg.

(b) MTCA Method B soil direct contact cleanup level (ingestion only)

(c) MTCA Method B cleanup level.

(d) MTCA Method A cleanup level for gasoline mixtures without benzene is 30 mg/kg. MTCA Method A cleanup level for gasoline mixtures with benzene is 100 mg/kg.

<b>Table B-5 - Analytical Results for Previous</b>	Grab Groundwater Samples
(Hart Crowser 2006c)	

Sheet 1 of 2

(Hart Crowser 2006c)					
Sample ID	MTCA	SP-3	SP-8		
·	Method A				
· .	Cleanup Level				
NWTPH-Gx in mg/L	,				
Mineral spirits/Stoddard		0.10 U	0.10 U		
Gasoline	0.8	0.10 U	0.10 U		
NWTPH-Dx in mg/L					
Kerosene/Jet fuel		0.2 U	0.2 U		
Diesel/Fuel oil	`        0.5	0.2 U	0.2 U		
Heavy oil	0.5	0.5 U	0.5 U		
Dissolved Metals in mg/L					
Lead	0.015	0.002 U	0.002 U 🔍		
Chromium	0.05	0.01	0.01 U		
Cadmium	0.005	0.005 U	0.005 U		
Arsenic	0.005	0.005 U	0.005 U		
Mercury	0.002	0.001 U	0.001 U		
Copper	0.592(a)	0.01 U	0.01 U		
Nickel	0.32(a)	0.01 U	0.01 U		
Zinc	4.8(a)	5	<b>10</b>		
Volatiles(8260) in µg/L					
Dichlorodifluoromethane		1.0 U	1.0 U		
Chloromethane		1.0 U	1.0 U		
Vinyl Chloride	. 0.2	0.2 U	0.2 U		
Bromomethane		1.0 U	1.0 U		
Chloroethane		1.0 U	1.0 U		
Trichlorofluoromethane		1.0 U	1.0 U		
1,1-Dichloroethene	_	1.0 U	1.0 U		
Methylene Chloride	5	1.0 U	1.0 U		
Trans-1,2-Dichloroethene		1.0 U	1.0 U		
1,1-Dichloroethane		1.0 U	1.0 U		
2,2-Dichloropropene		1.0 U	1.0 U		
Cis-1,2-Dichloroethene		1.0 U	1.0 U		
Chloroform	000	1.0 U	1.0 U		
1,1,1-Trichloroethane	200	1.0 U	1.0 U		
Carbon Tetrachloride		1.0 U 1.0 U	1.0 U		
1,1-Dichloropropene Benzene	5	1.0 U	1.0 U 1.0 U		
1,2-Dichloroethane(EDC)	5 5	1.0 U 1.0 U	1.0 U		
Trichloroethene	5	1.0 U	1.0 U		
1,2-Dichloropropane	5	1.0 U	1.0 U		
Dibromomethane		1.0 U	1.0 U		
Bromodichloromethane		1.0 U	1.0 U		
Cis-1,3-Dichloropropene		1.0 U	1.0 U		
Toluene	1,000	1.0 U	1.0 U		
Trans-1,3-Dichloropropene	1,000	1.0 U	1.0 U		
1,1,2-Trichloroethane		1.0 U	1.0 U		
Tetrachloroethene	5	1.0 U	1.0 U		
1,3-Dichloropropane	-	1.0 U	1.0 U		
Dibromochloromethane		1.0 U	1.0 U		

Table B-5 - Analytical Results for Previous Grab Groundwater S	amples
(Hart Crowser 2006c)	

Sheet 2 of 2

(Hart Crowser 2006c)						
Sample ID	MTCA	SP-3	SP-8			
	Method A					
1,2-Dibromoethane(EDB)	0.01	0.01 U	, 0.01 U			
Chlorobenzene		1.0 U	1.0 U			
1,1,1,2-Tetrachloroethane		່ 1.0 U	1.0 U			
Ethylbenzene	700	1.0 U	1.0 U			
Xylenes	1,000	1.0 U	1.0 U			
Styrene		1.0 U	1.0 U			
Bromoform		1.0 U	1.0 U			
lsopropylbenzene		1.0 U	1.0 U			
1,2,3-Trichloropropane		1.0 U	1.0 U			
Bromobenzene	•	1.0 U	1.0 U			
1,1,2,2-Tetrachloroethane		1.0 U	1.0 U			
n-Propylbenzene		1.0 U	1.0 U			
2-Chlorotoluene		1.0 U	1.0 U			
4-Chlorotoluene		1.0 U	1.0 U			
1,3,5-Trimethylbenzene		1.0 U	1.0 U			
tert-Butylbenzene	,	1.0 U	1.0 U			
1,2,4-Trimethylbenzene		1.0 U	1.0 U			
sec-Butylbenzene		1.0 U	1.0 U			
1,3-Dichlorobenzene		1.0 U	1.0 U			
Isopropyltoluene		1.0 U	1.0 U			
1,4-Dichlorobenzene		1.0 U	1.0 Ü			
1,2-Dichlorobenzene		1.0 U	1.0 U			
n-Butylbenzene		1.0 U	1.0 U			
1,2-Dibromo-3-Chloropropane		1.0 U	1.0 U			
1,2,4-Trichlorobenzene		1.0 U	1.0 U			
Hexachloro-1,3-butadiene		1.0 U	1.0 U			
Naphthalene	160	1.0 U	1.0 U			
1,2,3-Trichlorobenzene	•	1.0 U	1.0 U			

Sample analysis conducted by Advanced Analytical Laboratory (Redmond, WA) U = Not detected at detection limit indicated.

Blank indicates no MTCA criteria available.

Detected concentrations are bolded.

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Concentrations that exceed the screening criteria are boxed. (a) MTCA B groundwater protection criteria.
# APPENDIX C CHEMICAL DATA QUALITY REVIEW AND LABORATORY REPORT

**Annendiv** C

Hart Crowser 17433-05 October 31, 2011

## APPENDIX C CHEMICAL DATA QUALITY REVIEW AND LABORATORY REPORT

Eighty-one soil samples were collected between May 16 and June 20, 2011. The samples were submitted to Advanced Analytical Laboratory of Redmond, Washington, for chemical analysis. The sample results were reported as AAL Job Numbers A10517-2, A10518-3, A10521-1, A10531-3, A10603-1, A10603-3, A10609-1, A10616-6, A10617-1, and A10620-1.

Seventy-eight of the soil samples were analyzed for one or more of the following:

- Gasoline by Washington State Department of Ecology (Ecology) method NWTPH-Gx;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds by EPA Method 8021B;
- Diesel and heavy oil by Ecology method NWTPH-Dx;
- Total arsenic, cadmium, chromium, copper, lead, nickel, and zinc by EPA Method 7010;
- Total mercury by EPA Method 7471;
- Volatile organic compounds (VOCs) by EPA Method 8260B; and
- Total solids by Standard Method 2540B.

Quality assurance/quality control (QA/QC) reviews of laboratory procedures were performed on an ongoing basis by the laboratories. Hart Crowser performed the data review, using laboratory quality control results summary sheets, to ensure they met data quality objectives for the project. The following criteria were evaluated in the standard data quality review process:

- Holding times;
- Method blanks;
- Laboratory control sample (LCS) recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries;
- Laboratory duplicate relative percent differences (RPDs); and
- Reporting limits (RL).

The data were determined to be acceptable for use with minor qualification. Full laboratory results are presented at the end of this memo. Results of the data review follows.

#### **Sample Receiving Discrepancies**

AAL Job No. A10517-2: The soil samples Grab 1 and Grab 2 for NWTPH-Gx/BTEX analysis were collected in 4-ounce jars, rather than 40 mL VOA vials. As the samples were analyzed within 48 hours of collection, sample results were not qualified.

AAL Job No. A10518-3: The sampler listed the individual sample vials as different samples on the chain-of-custody (COC). The laboratory noted the error, and properly analyzed only one vial from each sample set.

AAL Job No. A10521-1: The COC indicated that samples TP-6-2, TP-9-1, TP-9-2, TP-10-1, and TP-13-1 were to be analyzed for both BTEX by EPA Method 8021B and VOCs by EPA Method 8260B. The laboratory only reported results from the EPA Method 8260B analyses.

AAL Job No. A10531-3: The sampler listed the individual sample vials as different samples on the COC. The COC was corrected at the laboratory, and only one vial from each sample set was analyzed.

#### Gasoline/BTEX Compounds by NWTPH-Gx/BTEX

The holding times were acceptable. Reporting limits were acceptable. There was no method blank contamination. Surrogate and LCS recoveries were within laboratory control limits. Laboratory duplicate RPDs were within laboratory control limits or not applicable when sample and duplicate results were non-detect.

MS recoveries fell within laboratory control limits with the following exception:

SP-1S MS/MSD: The recoveries fell within laboratory control limits. The RPD for benzene exceeded the laboratory control limits. As the source sample was non-detect for benzene, sample results were not qualified.

#### **Diesel and Heavy Oil by NWTPH-Dx**

The holding times were acceptable. Reporting limits were acceptable. There was no method blank contamination. Surrogate recoveries were within laboratory control limits. Laboratory duplicate RPDs were within laboratory

control limits or not applicable when sample and duplicate results were nondetect.

#### Total Metals by EPA 7010

The holding times were acceptable. Reporting limits were acceptable. There was no method blank contamination. LCS and MS recoveries were within method and laboratory control limits. Laboratory duplicate RPDs were within method and laboratory control limits.

LCS recoveries fell within method and laboratory control limits with the following exception:

LCS-06/06/11: The recoveries for lead fell within laboratory control limits of 70 to 130 percent, but exceeded the method control limits of 80 to 120 percent. Results for lead in the associated samples (T1-1, T2-1, T2-2, T2-3, T1-SP-1, and T1-SP-3) were qualified as estimated (J).

MS recoveries fell within method and laboratory control limits with the following exception:

 T1-SP-3 MS: The MS for lead was not reported due to matrix interferences. Results for lead in the source sample, T1-SP-3, were qualified as estimated (J).

### Total Mercury by EPA 7471

The holding times were acceptable. Reporting limits were acceptable. There was no method blank contamination. LCS and MS recoveries were within method and laboratory control limits. Laboratory duplicate RPDs were within method and laboratory control limits or not applicable when sample and duplicate results were non-detect.

#### VOCs by EPA 8260B

The holding times were acceptable. Reporting limits were acceptable. There was no method blank contamination. Surrogate, MS, and LCS recoveries were within laboratory control limits.

#### Total Solids by SM2540B

The holding times were acceptable.

L:\jobs\1743305\6th & Lenora Cleanup Action Report.doc

# LABORATORY REPORT ADVANCED ANALYTICAL LABORATORY

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ADVANCED ANALYTICAL

Environmental Testing Laboratory

May 19, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10517-2) Project.

Samples were received on *May 17, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

1. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10517-2 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17453-05 05/17/11

AAL Job Number:	A10517-2
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/17/ <b>11</b>

Analytical Results						Dupl	RPD
NWTPH-Gx / BTEX		MTH BLK	LCS	Grab 1	Grab 2	Grab 2	Grab 2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/17/11	05/17/11	05/17/11	05/17/11	05/17/11	05/17/11
Date analyzed	Limits	05/17/11	05/17/11	05/17/11	05/17/11	05/17/11	05/17/11
NWTPH-Gx, mg/kg	- 0			-	4		
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd	0004
Gasoline	5.0	nd		590	84	63	29%
<u>BTEX 8021B, μg/kg</u> Benzene Toluene Ethylbenzene Xylenes	20 50 50 50	nd nd nd	92% 84%	12,000 23,000 10,000 32,000	3,400 2,900 550 2,100	2,700 2,400 420 1,600	23% 19% 27% 27%
Surrogate recoveries: Trifluorotoluene Bromofluorobenzene	·	82% 76%	78% 73%	112% 75%	104% 108%	103% 106%	

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AAL Job Number:	A10517-2
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/17/11

Analytical Results					Dupl
NWTPH-Dx, mg/kg		MTH BLK	Grab 1	Grab 2	Grab 2
Matrix	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/17/11	05/17/11	05/17/11	05/17/11
Date analyzed	Limits	05/17/11	05/17/11	05/17/11	05/17/11
Kerosene/Jet fuel	20	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nđ
Surrogate recoveries:			_		
Fluorobiphenyl		110%	110%	111%	112%
o-Terphenyl		108%	106%	109%	108%
Surrogate recoveries: Fluorobiphenyl	50	110%	110%	111%	112

AAL Job Number:	A10517-2
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/17/11

Analytical Results		
Moisture, SM2540B	Grab 1	Grab 2
Matrix	Soil	Soil
Date analyzed	05/17/11	05/17/11
Moisture, %	38%	40%

# Sample Custody Record

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1910 Fairview Avenue East Seattle, Washington 98102-3699 HARTCROWSER Phone: 206-324-9530 FAX: 206-328-5581

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Inc.

Samples Shipped to: \_\_\_\_\_

					REQUESTED ANALYSIS					
PROJECT HART CRO SAMPLED		TH + LE	IUMBER ENORA WKE	CIÙ		OBSERVATIONS/COMMENTS COMPOSITING INSTRUCTION				
LAB NO.	SAMPLE ID	DESCRIPTIC	DN DATE	TIME	MATRIX					
	GRABI	EXC. 501	L 5/16/11	13:00	SOIL	XX I FUEL·LIKE ODOR				
	GRAB Z	EXC. SOI	L 5/16/11 L 5/16/11	13:05	SOR	× X I FUEL·LIKE ODOR × X I FUEL·LIKE ODOR				
RELINQUI	SHED BY	DATE	RECEIVED BY	(D/	DATE	SPECIAL SHIPMENT HANDLING OR     TOTAL NUMBER OF CONTAINE       STORAGE REQUIREMENTS:     SAMPLE RECEIPT INFORMATION	ERS			
Party	H. KASTER H. KASTER CLOWSER SHED BY	5//1/// 5 TIME DATE	N Avall SIGNATURE PRINT NAME COMPANY RECEIVED BY	AND L	DSTIT/11 TIME 10 32 DATE	1-407 JARS CUSTODY SEALS:				
SIGNATURE		TIME	SIGNATURE		TIME	COOLER NO.: STORAGE LOCATION: TURNAROUND TIME:				
PRINT NAM	E		PRINT NAME			See Lab Work Order No. <ul> <li>48 HOURS</li> <li>SIANDARD</li> <li>OTHER</li> <li>END OF</li> </ul> for Other Contract Requirements <ul> <li>72 HOURS</li> <li>OTHER</li> <li>END OF</li> </ul>	DAY			

ADVANCED ANALYTICAL

Environmental Testing Laboratory

May 19, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17453-05 (A10518-3) Project.

Samples were received on *May 18, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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#### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10518-3 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17453-05 05/18/11

AAL Job Number:	A10518-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/18/11

Analytical Results						DUP	RPD	
NWTPH-Gx / BTEX		MTH BLK	LCS	GS-S01	GS-S03	<b>GS-S03</b>	GS-S03	GS-S05
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
Date analyzed	Limits	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
NWTPH-Gx, mg/kg								
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd		nd
Gasoline	5.0	<u>nd</u>		230	38	47	21%	
<u>ΒΤΕΧ 8021Β, μg/kg</u>								
Benzene	20	nd	82%	3,200	1,400	1,500	7%	97
Toluene	50	nd	103%	5,000	1,800	2,100	15%	190
Ethylbenzene	50	nd		2,100	240	260	8%	nd
Xylenes	50	nd		6,300	1,300	1,400	7%	140
Surrogate recoveries:								
Trifluorotoluene		85%	71%	98%	79%	94%		108%
Bromofluorobenzene		122%	73%	112%	103%	114%	_	123%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

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A10518-3
Hart Crowser, Inc.
Julie Wukelic
6th & Lenora
17453-05
05/18/11

Analytical Results			•		MS	MSD	RPD
NWTPH-Gx / BTEX		GS-S07	GS-S09	GS-E01	GS-S05	GS-S05	GS-S05
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
Date analyzed	Limits	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
NWTPH-Gx, mg/kg							
Mineral spirits/Stoddard	5.0	nd	nd	nd			
Gasoline	5.0	77	35	14			
<u>BTEX 8021B, µg/kg</u> Benzene	20	2,200	800	nd	78%	88%	11%
Toluene	50	3,500	1,300	220	89%	73%	19%
Ethylbenzene Xylenes	50 50	510 2,700	200 800	nd 55			
Surrogate recoveries:		•					
Trifluorotoluene		98%	100%	87%	85%	86%	
Bromofluorobenzene		111%	114%	106%	8 <u>7%</u>	83%	

AAL Job Number:	A10518-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
<b>Client Project Number:</b>	17453-05
Date received:	05/18/11

Analytical Results									Dupl
NWTPH-Dx, mg/kg		MTH BLK	GS-S01	GS-S03	GS-S05	GS-S07	GS-S09	GS-E01	GS-E01
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
Date analyzed	Limits	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	25	nd	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nđ	nd	nd	nd
Surrogate recoveries:								•	
Fluorobiphenyl o-Terphenyl		111% 99%	111% 109%	112% 108%	110% 105%	109% 104%	108% 104%	110% 106%	110% 105%

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits C - coelution with sample peaks Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

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AAL Job Number:	A10518-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/18/11

Moisture, SM2540B	GS-S01	GS-S03	GS-S05	GS-S07	GS-S09	GS-E01
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date analyzed	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11	05/19/11
Moisture, %	24%	22%	15%	22%	20%	22%

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Environmental Testing Laboratory

May 26, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10521-1) Project.

Samples were received on *May 21, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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#### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10521-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 05/21/11

AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

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## Analytical Results

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8260B, µg/kg		MTH BLK	LCS	TP6-2	TP9-1	TP9-2	TP10-1	TP13-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
MTBE	50	nd		nd	nd	nd	nd	nd
Dichlorodifluoromethane	50	nd		nd	nd	nd	nd	nd
Chloromethane	50	nd		nd	nd	nd	nd	nd
Vinyl chloride	50	nd		nd	nd	nd	nd	nd
Bromomethane	50	nd		nd	nd	nd	nd	nd
Chloroethane	50	nd		nd	nd	nd	nd	nd
Trichlorofluoromethane	50	nd		nd	nd	nd	nd	nd
1,1-Dichloroethene	50	nd		nd	nd	nd	nd	nd
Methylene chloride	20	nd		nd	nd	nđ	nd	nd
trans-1,2-Dichloroethene	50	nd		nd	nd	nd	nd	nd
1,1-Dichloroethane	50	nd		nd	nd	nd	nd	nd
2,2-Dichloropropane	50	nd		nd	nd	nd	nd	nď
cis-1,2-Dichloroethene	50	nd		nd	nd	nd	nd	nd
Chloroform	50	nd		nd	nd	nd	nd	nd
1,1,1-Trichloroethane	50 -	nđ		nd	nd	nd	nd	nd
Carbontetrachloride	50	nd		nd	nd	nd	nd	nd
1,1-Dichloropropene	50	nd		nd	nd	nd	nd	nd
Benzene	20	nd	92%	nd	nd	120	140	290
1,2-Dichloroethane(EDC)	20	nd		nd	nd	nd	nd	nđ
Trichloroethene	20	nd	93%	nd	nd	nd	nd	nd
1,2-Dichloropropane	50	nd		nd	nd	nd	nd	nd
Dibromomethane	50	nd		nđ	nd	nd	nd	nđ
Bromodichloromethane	50	nd		nđ	nd	nd	nd	nđ
cis-1,3-Dichloropropene	50	nd		nd	nd	nd	nd	nd
Toluene	50	nd	89%	56	nd	59	nd	64
trans-1,3-Dichloropropene	50	nd		nd	nd	nđ	nd	nd
1,1,2-Trichloroethane	50	nd		nd	nd	nd	nd	nd
Tetrachloroethene	50	nđ		nd	nd	nd	nd	nd
1,3-Dichloropropane	50	nd		nd	nd	nd	nd	nd
Dibromochloromethane	20	nd		nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)*	. 5	nd		nd	nd	nd	i nd	nd
Chlorobenzene	50	nd	97%	nd	nd	nd	nđ	nd
1,1,1,2-Tetrachloroethane	50	nd		nd	nd	nd	nd	nd
Ethylbenzene	50	nd		nd	nd	nd	nd	120
Xylenes	50	nd		nd	nd	nd	nd	140
Styrene	50	nd		nd	nd	nd	nd	nd
Bromoform	50	nd		nd	nd	nd	nd	nd
Isopropylbenzene	50	nd		nd	nd	nd	nd	nd
1,2,3-Trichloropropane	50	nd		nd	nd	nd	nd	nd
Bromobenzene	50	nd		nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	50	nd		nd	nd	nd	nd	nd
n-Propylbenzene	50	nd		240	nd	nd	nd	nd
2-Chlorotoluene	50	nd		nd	nd	nď	nd	nd
4-Chlorotoluene	50	nd		nd	nd	nď	nd	nd
1,3,5-Trimethylbenzene	50	nd		nd	nd	nd	nd	nd
tert-Butylbenzene	50	nd		nd	nd	nd	nd	nd

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AAL Job Number:A10521-1Client:Hart Crowser, Inc.Project Manager:Julie WukelicClient Project Name:6th & LenoraClient Project Number:17433-05Date received:05/21/11

#### Analytical Results

8260B, µg/kg		MTH BLK	LCS	TP6-2	TP9-1	TP9-2	TP10-1	TP13-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
-								
1,2,4-Trimethylbenzene	50	nd		nd	nd	nd	nd	nd
sec-Butylbenzene	50	_ nđ		80	nd	. nd	nd	nd
1,3-Dichlorobenzene	-50	nd		nd	nd	nd	nd	nd
Isopropyltoluene	50	ņd		nd	nd	nd	nd	nd
1,4-Dichlorobenzene	50	nd		nd	ņd	nd	nd	nd
1,2-Dichlorobenzene	50	nd		nd	ńd	nd	nd	nd
n-Butylbenzene	50	nđ	-	. 300	nd	nd	' nd	nd
1,2-Dibromo-3-Chloropropane	50	nd		nd	nd	· nd	nd	nd
1,2,4-Trichlorobenzene	50	nd		. nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	50	nd		nd	nd	nd	nd	nd
Naphtahlene	50	nd		nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	50	nd		nd	nd	nd	nd	nd
*-instrument detection limits			•				-	
Surrogate recoveries								
Dibromofluoromethane		114%	111%	116%	112%	115%	115%	113%
Toluene-d8		107%	99%	106%	109%	113%	106%	104%
1,2-Dichloroethane-d4		104%	102%	103%	101%	102%	105%	102%
4-Bromofluorobenzene		119%	111%	130%	119%	117%	116%	111%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits M-matrix interference Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

#### Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

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AAL Job Number: Client:	A10521-1 Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

Analytical Results		MS	MSD	RPD
8260B, µg/kg		TP6-2	TP6-2	TP6-2
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11		
Date analyzed	Limits	05/21/11	05/21/11	05/21/11
МТВЕ	50			
Dichlorodifluoromethane	50			
Chloromethane	50			
Vinyl chloride	50			
Bromomethane	50			
Chloroethane	50			
Trichlorofluoromethane	50		•	
1,1-Dichloroethene	50			
Methylene chloride	20			
trans-1,2-Dichloroethene	50			
1,1-Dichloroethane	50			
2,2-Dichloropropane	50			
cis-1,2-Dichloroethene	50			
Chloroform	50			
1,1,1-Trichloroethane	50			
Carbontetrachloride	50			
1,1-Dichloropropene	50			
Benzene	20	130%	123%	5%
1,2-Dichloroethane(EDC)	20			
Trichloroethene	20	130%	121%	8%
1,2-Dichloropropane	50			
Dibromomethane	50			
Bromodichloromethane	50			
cis-1,3-Dichloropropene	50			
Toluene	50	108%	111%	3%
trans-1,3-Dichloropropene	50			
1,1,2-Trichloroethane	50			
Tetrachloroethene	50			
1,3-Dichloropropane	50			
Dibromochloromethane	20			
1,2-Dibromoethane (EDB)*	5			
Chlorobenzene	50	115%	112%	3%
1,1,1,2-Tetrachloroethane	50			
Ethylbenzene	50			
Xylenes	50			
Styrene	50			
Bromoform	50			
Isopropylbenzene	50			
1,2,3-Trichloropropane	50			
Bromobenzene	50			
1,1,2,2-Tetrachloroethane	50			
n-Propylbenzene	50			
2-Chlorotoluene	50			
4-Chlorotoluene	50			
1,3,5-Trimethylbenzene	50			
tert-Butylbenzene	50			

AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11
Date received.	05/21/11

Analytical Results		MS	MSD	RPD
8260B, µg/kg		TP6-2	TP6-2	TP6-2
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11
1,2,4-Trimethylbenzene	50			
sec-Butylbenzene	50			
1,3-Dichlorobenzene	50			
Isopropyltoluene	50			
1,4-Dichlorobenzene	50			
1,2-Dichlorobenzene	50			
n-Butylbenzene	50			
1,2-Dibromo-3-Chloropropane	50			
1,2,4-Trichlorobenzene	50			
Hexachloro-1,3-butadiene	50			
Naphtahlene	50			
1,2,3-Trichlorobenzene	50			•
*-instrument detection limits				
Surrogate recoveries	_			
Dibromofluoromethane		113%	115%	
Toluene-d8		110%	102%	
1,2-Dichloroethane-d4		104%	106%	
4-Bromofluorobenzene		117%	114%	

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits M-matrix interference Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

#### Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

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AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

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Analytical Results									
NWTPH-Dx, mg/kg		MTH BLK	TP1-1	TP1-2	TP2-2	TP3-2	TP6-2	TP9-1	TP9-2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nď	nd	nd
Diesel/Fuel oil	20	nđ	nđ	nd	nd	nd	nd	nd	nd
Heavy oil	50	nd							
Surrogate recoveries:									
Fluorobiphenyl		114%	121%	114%	112%	114%	114%	114%	113%
o-Terphenyl		110%	130%	109%	108%	109%	109%	108%	108%

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits C - coelution with sample peaks Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

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AAL Job Number:A10521-1Client:Hart Crowser, Inc.Project Manager:Julie WukelicClient Project Name:6th & LenoraClient Project Number:17433-05Date received:05/21/11

Analytical Results						Dupi
NWTPH-Dx, mg/kg		TP10-1	TP11-1	TP12-2	TP13-1	TP13-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd
Surrogate recoveries:						
Fluorobiphenyl			114%	111%	113%	114%
o-Terphenyl		106%	109%	104%	107%	109%

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AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

Analytical Results	•								
NWTPH-Gx / BTEX		MTH BLK	LCS	TP1-1	TP1-2	TP2-2	TP3-1	TP3-2	TP4-2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	<u>05/21/11</u>	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd		nd	nđ	nd	nd	nd	nd
Gasoline	5.0	nd		nd	nd	nd	nd	nd	nd
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	nd	73%	nd	nd	nd	nd	nd	nd
Toluene	50	nd	83%	nd	nd	nd	nd	` nd	nd
Ethylbenzene	50	nd		nd	nd	nd	nd	nd	nd
Xylenes	50	nd		nd	nd	nd	nđ	_ nd	nd
Surrogate recoveries:									
Trifluorotoluene		86%	87%	95%	94%	96%	91%	91%	91%
Bromofluorobenzene		101%	94%	94%	94%	100%	<u>91%</u>	89%	93%

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AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Client Project Number:	17433-05
Date received:	05/21/11

Analytical Results									
NWTPH-Gx / BTEX		TP5-1	TP6-1	TP6-2	TP7-2	TP8-1	TP9-1	TP9-2	TP10-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd							
Gasoline	5.0	nd							
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	nđ	nd		nd	nd			
Toluene	50	nd	nd		89	88			
Ethylbenzene	50	nd	nd		nd	nd			
Xylenes	50	nd	nd		nd	· nd			
Surrogate recoveries:									
Trifluorotoluene	-	98%	90%	121%	91%	97%	90%	123%	119%
Bromofluorobenzene		95%	94%	101%	98%	121%	94%	97%	97 <u>%</u>
								-	

AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

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Analytical Results							Dupl	MS	MSD
NWTPH-Gx / BTEX		TP11-1	TP12-1	TP12-2	TP13-1	TP14-1	TP14-1	TP1-1	TP1-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
Date analyzed	Limits	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11	05/21/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd	nd	nd	nd	nd	nd		
Gasoline	5.0	nd	nd	nď	12	nd	nd		
<u>ΒΤΕΧ 8021Β, μg/kg</u>									
Benzene	20	nd	nd	nd		nd	nd	81%	88%
Toluene	50	nd	nd	nd		nd	nd	78%	85%
Ethylbenzene	50	nd	nd	nd		nd	nd		
Xylenes	50	nd	nd	nd		nd	nd		
Surrogate recoveries:									
Trifluorotoluene		84%	83%	86%	86%	79%	94%	87%	74%
Bromofluorobenzene		105%	106%	109%	108%	99%	115%	112%	93%

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AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

Analytical Results		RPD
NWTPH-Gx / BTEX	-	TP1-1
Matrix	Soil	Soil
Date extracted	Reporting	05/21/11
Date analyzed	Limits	05/21/11
NWTPH-Gx, mg/kg Mineral spirits/Stoddard Gasoline	5.0 5.0	·
<u>BTEX 8021B, μg/kg</u> Benzene	20	8%
Toluene	50	9%
Ethylbenzene	50	570
Xylenes	50 50	
Surrogate recoveries:		
Trifluorotoluene		
Bromofluorobenzene		

AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

#### Analytical Results

Metals (7010/7471), mg/kg		MTH BLK	LCS	TP6-2	TP9-1	TP9-2	TP10-1	TP12-2	TP13-1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11
Date analyzed	Limits	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11
Lead (Pb)	1.0	nd	100%	22	13	7.1	12	9.0	3.8
Chromium (Cr)	2.0	nd	114%			3.9		•	2.2
Cadmium (Cd)	1.0	nd	104%			nd			nd
Arsenic (As)	2.0	nd	99%			nd			nd
Mercury (Hg) (7471)	0.5	nd	94%			nd			nd
Copper (Cu)	1.0	nd	95%			28			23
Nickel (Ni)	1.0	nd	108%			13			8.5
Zinc (Zn)	1.0	nd	98%			51			49

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits

na - not analyzed

M- matrix interference

Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

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Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089.

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received:	A10521-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 05/21/11
Date received:	05/21/11

#### Analytical Results

Metals (7010/7471), mg/kg		TP14-1
Matrix	Soil	Soil
Date extracted	Reporting	05/22/11
Date analyzed	Limits	05/22/11
Lead (Pb)	1.0	6.6
Chromium (Cr)	2.0	
Cadmium (Cd)	1.0	
Arsenic (As)	2.0	
Mercury (Hg) (7471)	0.5	
Copper (Cu)	1.0	
Nickel (Ni)	1.0	
Zinc (Zn)	1.0	

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AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	05/21/11

Analytical Results								
Moisture, SM2540B	TP1-1	TP1-2	TP2-2	TP3-1	TP3-2	TP4-2	TP5-1	TP6-1
Matrix	Soil							
Date analyzed	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11
Moisture, %	16%	20%	20%	15%	22%	23%	22%	_ 14%

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A10521-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05
17433-05 05/21/11

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Analytical Results	_					1		
Moisture, SM2540B	TP6-2	TP7-2	TP8-1	TP9-1	TP9-2	<u>TP10-1</u>	TP11-1	TP12-1
Matrix	 Soil	Soil	Soil	· Soil	Soil	Soil	Soil	Soil
Date analyzed	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11	05/22/11
Moisture, %	12%	21%	22%	25%	15%	12%	20%	21%

AAL Job Number:	A10521-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic 6th & Lenora
Client Project Name: Client Project Number:	17433-05
Date received:	05/21/11
Bato rooon ou.	00.2111

Analytical Results			
Moisture, SM2540B	TP12-2	TP13-1	TP14-1
Matrix	Soil	Soil	Soil
Date analyzed	05/22/11	05/22/11	05/22/11
Moisture, %	22%	14%	22%

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# Sample Custody Record

Samples Shipped to: \_\_\_\_

DS H

# 5/20/11 page 1 of 2 HARTCROWSER

H\_\_\_\_\_OW\_\_\_\_, ... 1910 Fairview Avenue Eas Seattle, Washington 98102-369

Phone: 206-324-9530 FAX: 206-328-558

						T				REQUEST	ED AN	AIVSIS		-		
JOB 17433-05 LAB NUMBER							REQUESTED ANALYSIS						/	RS		
PROJECT NAME 6th Lewora								sp.	5	61			(     )	CONTAINERS	OBSERVATIONS/COMMENTS/	
		CT Julie		lic		<b>bTEX</b>	×	Hestal	E	826				INO	COMPOSITING INSTRUCTIONS	
10	////					0	Dex			6.9				OF C		
SAMPLED	BY: Je	isse E	Verten			TPH 6	-HJL	leta	lotal	Vo				NO.		
LAB NO.	SAMPLE ID	DESCRIPTION	N DATE	TIME	MATRIX	1	r t	<u>,</u>	-		-					
	TP-1-1	grab c2	1 5/20	0845	soil	0	Ð							3	1-402, glass jar - 240mL VOA	
	TP-1-2	1 05		0855		and the second se	00							3		
	12-2-1	e2		0825										3		
	TP-2-2	C4		0835		8	B							3		
	TP-3-1	e2.5		0905		R	3							3		
	TP-3-2	e5	*	0910		8	DE							3		
	TP-4-1	e2'	2	0915										1	1 - 402-glass only	
-	TP-4-2	@4.9	5	0520		BAB								3	1-402-glass only 1-402-glass - 2 40 mL VOAs	
	TP-5-1	e2-5	5'	0930		8								3		
	TP-6-1	e2'		<b>P</b> 940		X	-								X-Norush	
	TP-6-2	04		0950		Ø	00	-	X	$\otimes$				3	& - Rush	
	TP-7-1	e3		0155										3	0 1	
RELINOU	IISHED BY	DATE	RECEIVED BY		DATE	*				NT HANDL		JR		54 TOTAL NUMBER OF CONTAINERS SAMPLE RECEIPT INFORMATION CUSTODY SEALS:		
MATUR	er.		V. Wan		05/21/1	1 211	JKAG	EREC	)UIN	REMENTS:	4		1			
JESSE	P. Ovorton	TIME	PRINT NAME	VANOV	TIME	1							/	Y	YES NO N/A	
COMPANY	rowser	1530	COMPANY	L	1000								/	TY	IYES □NO EMPERATURE	
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HELING.	JILU U,	Unit -	NEXET I			СС	JOLEF	R NO.:	:			STORAGE L	OCATION:		RNAROUND TIME:	
SIGNATURE		TIME	SIGNATURE		TIME	-						*			2 4 HOURS	
PRINT NAM	AE		PRINT NAME		THVIE	See Lab Work Order No.									48 HOURS STANDARD	
COMPANY			COMPANY							ct Requiren			]		72 HOURS OTHER	


# Sample Custody Record

Hart Crowser, Inc. 1910 Fairview Avenue East Seattle, Washington 98102-3699

JOB NUM	BER 17433.	-05	LAB NUMBER				Т	ESTING	à	- 10	
PROJECT	MANAGER	Julie	Wulkelic				0	0		CONTAINERS	
PROJECT	NAME	651	Lenora		×	1	10 m			ITAIR	OBSERVATIONS/COMMENTS/
					STE)	Dex	2	3		CON	COMPOSITING INSTRUCTIONS
SAMPLED	BY:	esse &	Derton			1 -		Voc		NO. OF	
LAB NO.	SAMPLE	TIME	STATION	MATRIX	-PHG	Ha- (1	(-)	7		2	
	TP-7-2	1005	gralo e (1'	soil	Ø					3	1-402 glass : 2 tomL VOAs
	TP-8-1	1015	1 225'	1	Ø					3	3
	TP-9-1	1035	e4'		Ð	Đ	×	Ø		3	elevated PID reading
	TP-9-2	1050	255		00	BX		X		3	11.
	TP-10-1	1025	c5.5'		Ø	X	X	Ø		3	
		100	C2-51		8	8				3	
		1115	e 3'		B					3	
		1130	e le'		8	D	X			3	
	TP-13-1	1135	e 4'		Ø	AX	•	Ø		3	elevated PID reading
		1245	1 04'	1	CS .		X			3	L
											&-Rush
					19	11 2	5	5			X-Norush
REL	NOUISHED BY	DATE	RECEIVED BY	DATE	тот	TAL NUN	14				METHOD OF SHIPMENT
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COMPANY	Crowser	1530	COMPANY								
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COMPANY			COMPANY								

ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 02, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17453-05 (A10531-3) Project.

Samples were received on *May 31, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center  $\blacksquare$  2821 152 Avenue NE  $\blacksquare$  Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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## Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10531-3 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17453-05 05/29/11

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AAL Job Number:	A10531-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/29/11

Analytical Results						MS	MSD	RPD
NWTPH-Gx / BTEX		MTH BLK	LCS	EX1	EX7	EX7	EX7	EX7
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11
Date analyzed	Limits	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11
<u>NWTPH-Gx, mg/kg</u> Mineral spirits/Stoddard	5.0	nd		nd	nd			
Gasoline	5.0 5.0	nd		140	41			
		10		- 140	41			
<u>BTEX 8021B, μg/kg</u>								
Benzene	20	nd	82%	nd	nd	101%	115%	13%
Toluene	50	nd	103%	240	220	113%	110%	2%
Ethylbenzene	50	nd	•	610	250			
Xylenes	50	nd		1,200	570			
Surrogate recoveries:								
Trifluorotoluene		81%	82%	88%	95%	102%	92%	
Bromofluorobenzene		100%	102%	100%	104%	104%	99%	

-

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

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AAL Job Number:	A10531-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/29/11

Analytical Results						-	Dupl
NWTPH-Dx, mg/kg		MTH BLK	EX1	EX3	EX5	EX7	EX7
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11
Date analyzed	Limits	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	3,400	nd	nd	57	57
Heavy oil	50	nd	nđ	nd	nd	nd	nd
Surrogate recoveries:						_	
Fluorobiphenyl		124%	128%	121%	121%	122%	120%
o-Terphenyl		119%	123%	117%	115%	116%	115%

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AAL Job Number:	A10531-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/29/11

Analytical Results						Dupl	RPD	MS
Metals (7010/7471), mg	j/kg	MTH BLK	LCS	EX1	EX7	EX7	EX7	EX7
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11
Date analyzed	Limits	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11	06/01/11
					-		-	
Lead (Pb)	1.0	nd	102%	5.7	11	11	1%	88%
Chromium (Cr)	2.0	nd	99%	nd	2.3	2.6	10%	89%
Cadmium (Cd)	1.0	nd	106%	nd	nd	nd		98%
Arsenic (As)	2.0	nd	99%	nd	2.3	2.4		89%
Mercury (Hg) (7471)	0.5 .	nđ	111%	nd	nd	nd		86%
Copper (Cu)	1.0	nd	101%	20	24	23	4%	
Nickel (Ni)	1.0	nd	109%	15	20	20	2%	
Zinc (Zn)	1.0	nd	106%	29	27	27	2%	

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed M- matrix interference Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number:	A10531-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17453-05
Date received:	05/29/11

Analytical Results				
Moisture, SM2540B	EX1	EX3	EX5	EX7
Matrix	Soil	Soil	Soil	Soil
Date analyzed	05/31/11	05/31/11	05/31/11	05/31/11
Moisture, %	27%	19%	20%	18%

	ple Cust		ecord Analy fi	cal					HA	RT	CROV	VSER	2	Harc Crowser, mo 1910 Fairview Avenue Eas Seattle, Washington 98102-369 Phone: 206-324-9530 FAX: 206-328-558
PROJECT	Kin Fa	+ Lev	NUMBER	elife		HAH GAY BTRY	HC 8 metals	REQ	UESTED	ANALY	/SIS		NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
LAB NO.	SAMPLE ID	DESCRIPT	ION DATE	TIME	MATRIX									
	EX1 Ex2	UST-Soi	1 5/1/1	1232	Soil	$X \rangle$	(X)						2	Dudicate VO45, 1 402 far
	EK3			1247			/						2	)
-	EX4	1		1249			V						1	}
	EK5			1320			/						2	711
-	EK6			1325						1			1	5
	EX7			1332		VV	$\wedge$						3	2
	EXS	$\checkmark$		1337-	1	$\mathbb{N}$	M						1	5
	÷												12	
RELINQUI	SHED BY	DATE	RECEIVED B	Y	DATE	SPECI	AL SHIP	MENT H	ANDLIN	GOR			10	TOTAL NUMBER OF CONTAINERS
Bignature Bignature	In Payne	5/28/1/ TIME	SIGNATURE	HNOV	05/24/11 TIME		AGE REC	UIREME	NTS:				CU	IPLE RECEIPT INFORMATION STODY SEALS: YES DNO DN/A
PRINT NAM COMPANY	houser	0700		H	1300									IOD CONDITION /ES
RELINQUI	SHED BY	DATE	RECEIVED B	Y	DATE								C C R 2 2 3 0	IPMENT METHOD: HAND COURIER OVERNIGHT
SIGNATURE		TIME	SIGNATURE		TIME	COOL	ER NO.:			STO	ORAGE LO	CATION:		AROUND TIME: OR same day 24 HOURS 1 WEEK
PRINT NAM	E	TIVIE	PRINT NAME	1.10	TIVE	See La	ab Work	Order No	0.	-			-	48 HOURS STANDARD
COMPANY		Level and Level	COMPANY	1.1.1				tract Rec		nts				72 HOURS OTHER

White and Yellow Copies to Lab

Pink to Project Manager L

Lab to Return White Copy to Hart Crowser

Gold to Sample Custodian

ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 06, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10603-1) Project.

Samples were received on *June 03, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

1. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *È-mail: aachemlab@yahoo.com* 

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### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10603-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/03/11

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AAL Job Number:	A10603-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results									
NWTPH-Gx / BTEX		MTH BLK	LCS	SŴ-1	TP-15	SW-2	TP-16	SW-3	TP-17
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd	nd	nd	nd
Gasoline	5.0	nd		nd	nd	nd	nd	nđ	nd
BTEX 8021B, μg/kg									
Benzene	20	nd	71%	nd	nd	nd	nd	nd	nd
Toluene	50	nd	74%	nd	nd	nđ	nd	nd	nd
Ethylbenzene	50	nd		nd	nd	nd	nd	nd	nd
Xylenes	50	nd		nd	nd	nđ	nd	nd	nd
Surrogate recoveries:					•				
Trifluorotoluene		77%	75%	96%	92%	92%	91%	95%	91%
Bromofluorobenzene		76%	81%	115%	113%	114%	112%	118%	111%

AAL Job Number:	A10603-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results							Dupl	MS	MSD
NWTPH-Gx / BTEX		TP-18	TP-19	TP-20	TP-21	TP-22	TP- <u>22</u>	TP-22	TP-22
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
NWTPH-Gx, mg/kg					,				
Mineral spirits/Stoddard	5.0	nd	nd	nd	nd	nd	nd		
Gasoline	5.0	nd	<u>nd</u>	nd	nd	nd	nd		
<u>ΒΤΕΧ 8021Β, μg/kg</u>									
Benzene	. 20	nd	nd	nd	nd	nd	nd	77%	82%
Toluene	50	nd	nd	nd	nd	nd	nd	70%	72%
Ethylbenzene	50	nd	nd	nd	nd	nd	nd		
Xylenes	50	nd	nd	nd	nd	nd	nd		
Surrogate recoveries:	_								
Trifluorotoluene		93%	95%	115%	101%	84%	85%	76%	73%
Bromofluorobenzene		1 <u>13%</u>	115%	118%	114%	91%_	83%	81%	78%

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AAL Job Number:	A10603-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results		RPD
NWTPH-Gx / BTEX		TP-22
Matrix	Soil	Soil
Date extracted	Reporting	06/03/11
Date analyzed	Limits	06/03/11
<u>NWTPH-Gx, mg/kg</u> Mineral spirits/Stoddard Gasoline	5.0 5.0	
<u>BTEX 8021B, µg/kg</u> Benzene Toluene Ethylbenzene Xylenes	20 50 50 50	6% 3%

## Surrogate recoveries: Trifluorotoluene Bromofluorobenzene

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

Client: H Project Manager: Client Project Name: Client Project Number:	A10603-1 Hart Crowser, Inc. Julie Wukelic 5th & Lenora 17433-05 06/03/11
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Analytical Results									
Moisture, SM2540B		SW-1	TP-15	SW-2	TP-16	SW-3	TP-17	TP-18	TP-19
Matrix		Soil	Soil						
Date analyzed	-	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/ <u>11</u>	06/03/11
Moisture, %		23%	21%	22%	19%	23%	20%	16%	23%

## Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

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AAL Job Number:	A10603-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results			
Moisture, SM2540B	TP-20	TP-21	TP-22
Matrix	Soil	Soil	Soil
Date analyzed	06/03/11	06/03/11	06/03/11
Moisture, %	20%	17%	22%

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# Sample Custody Record DATE 6211 PAGE OF HARTCROWSER

Hart Crowser, Inc. 1910 Fairview Avenue East Seattle, Washington 98102-3699

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NANAGER_Julie Wilcelic NAME_Cette à Lenorg				
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	105			
1. PROVIDE WHITE AND YELLOW COPIES TO LABORATORY 2. RETURN PINK COPY TO PROJECT MANAGER				
	SIGN FOR RECEIPT			
E COPY TO HAP	AT CROWSER			
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ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 06, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10603-3) Project.

Samples were received on *June 03, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center  $\blacksquare$  2821 152 Avenue NE  $\blacksquare$  Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10603-3 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/03/11

AAL Job Number:	A10603-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

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Analytical Results									Dupl
NWTPH-Gx / BTEX		MTH BLK	LCS	T1-1	T1-2	T1-3	T2-1	T2-2	T2-2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
<u>NWTPH-Gx, mg/kg</u>									
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd	nd	nd	nd
Gasoline	5.0	nd	-	120	37	49	5.9	nd	nd
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	nd	71%	1,300	260	310	nd	nd	nd
Toluene	50	nd	74%	1,000	140	230	71	nđ	nd
Ethylbenzene	50	nd		2,200	530	790	nd	nd	nd
Xylenes	50	nd	-	2,900	590	1,000	97	nd	nd
Surrogate recoveries:									
Trifluorotoluene		77%	75%	104%	92%	92%	103%	88%	101%
Bromofluorobenzene		76%	81%	118%	110%	105%	110%	107%	107%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number:	A10603-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results						MS	MSD	RPD
NWTPH-Gx / BTEX		T2-3	T1-SP-1	T1-SP-2	T1-SP-3	T2-3	<u>T2-3</u>	T2-3
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
NWTPH-Gx, mg/kg								
Mineral spirits/Stoddard	5.0	nd	nd	nd	nd			
Gasoline	5.0	nd	1,500	280	830			
<u>ΒΤΕΧ 8021Β, μg/kg</u>								
Benzene	20	nd	12,000	930	8,700	100%	130%	26%
Toluene	50	nd	21,000	1,700	11,000	101%	122%	19%
Ethylbenzene	50	nd	23,000	3,200	12,000			
Xylenes	50	nd	64,000	4,100	30,000			
		•						
Surrogate recoveries:								
Trifluorotoluene	-	95%	107%	75%	95%	102%	103%	
Bromofluorobenzene		101%	10 <u>1%</u>	82%	. 89%	108%	10 <u>2%</u>	

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number:	A10603-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

NWTPH-Dx, mg/kg		MTH BLK	T1-1	T1-2	T1-3	T2-1	T2-2	T2-3	T1-SP-1
Matrix	Soil '	Soil							
Date extracted	Reporting	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11	06/03/11
Kerosene/Jet fuel	20	nd							
Diesel/Fuel oil	20	nd							
Heavy oil	50	nd							
Surrogate recoveries:									
Fluorobiphenyl		92%	93%	93%	91%	91%	92%	90%	90%
o-Terphenyl		110%	105%	104%	104%	102%	103%	102%	101%

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AAL Job Number:	A10603-3
Client: Project Manager:	Hart Crowser, Inc. Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number: Date received:	17433-05 06/03/11
Date received.	00/03/11

Analytical Results				Dupl
NWTPH-Dx, mg/kg		T1-SP-2	T1-SP-3	T1-SP-3
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/03/11	06/03/11	06/03/11
Date analyzed	Limits	06/03/11	06/03/11	06/03/11
Kerosene/Jet fuel	20	nd	ˈ nd	nd
Diesel/Fuel oil	20	nd	nd	nd
Heavy oil	50	nd_	nd	nd
٠ ١				
Surrogate recoveries:				
Fluorobiphenyl		90%	90%	90%
o-Terphenyl		101%	100%	100%

AAL Job Number:	A10603-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

Analytical Results									
Metals (7010/7471),	mg/kg	MTH BLK	LCS	T2-1	T2-2	T2-3	T1-SP-1	T1-1	T1-SP-3
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11
Date analyzed	Limits	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11
Lead (Pb)	1.0	nd	126%	52	22	7.3	25	11	15

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed

M- matrix interference

Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

.

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received:	
Date received:	06/03/11

Analytical Results		Dupl	RPD	MS
Metals (7010/7471), mg/kg		T1-SP-3	T1-SP-3	T1-SP-3
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/06/11	06/06/11	06/06/11
Date analyzed	Limits	06/06/11	06/06/11	06/06/11
Lead (Pb)	1.0	17	11%	м

1

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed M- matrix interference Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number:	A10603-3
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/03/11

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Analytical Results									
Moisture, SM2540B	T1-1	T1-2	T1-3	T2-1	T2-2	T2-3	T1-SP-1	T1-SP-2	T1-SP-3
Matrix	Soil								
Date analyzed	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11	06/06/11
Moisture, %	16%	14%	17%	15%	15%	16%	17%	19%	16%

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# Sample Custody Record

Samples Shipped to: ADVANCED ANALYTICAL

K10665 3



Ha OWS 1700 WESTLAKE AVE N 1910 Fairview Avenu

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**REQUESTED ANALYSIS** 10B 17433-05 LAB NUMBER CONTAINERS C× X Ax. PROJECT NAME 6TH + LENORA **OBSERVATIONS/COMMENTS/** COMPOSITING INSTRUCTIONS HART CROWSER CONTACT JULZE WUKELLE NWTPH-NWTPH BTEX LEAD OF PETER SMILTINS NO. SAMPLED BY: PRS LAB NO. SAMPLE ID DESCRIPTION DATE TIME MATRIX XXXX 71-1 6/3/11 1025 SOIL T1-2 1030 T1-3 1035 T2-1 1050 & Added on 06/06/11 same day TAT 1055 T2-Z 72-3 1100 T1-5P-1 1105 TI-SP-Z 1110  $\times \times \times \times$ 1115 71-58-3 **RELINQUISHED BY** DATE RECEIVED BY DATE SPECIAL SHIPMENT HANDLING OR 9 TOTAL NUMBER OF CONTAINERS SIGNATURE EVANOV STORAGE REQUIREMENTS: 06/03/11 SAMPLE RECEIPT INFORMATION 6/3/11 SIGNATURE **CUSTODY SEALS:** TYES **NO** □N/A PETER SMILTINS PRINT NAME TIME TIME GOOD CONDITION 1505 HC YES **NO** COMPAN ~1300 COMPANY TEMPERATURE SHIPMENT METHOD: HAND DATE **RELINQUISHED BY** DATE **RECEIVED BY** COURIER OVERNIGHT COOLER NO .: STORAGE LOCATION: TURNAROUND TIME: SIGNATURE SIGNATURE X24 HOURS □ 1 WEEK TIME TIME PRINT NAME PRINT NAME 48 HOURS STANDARD See Lab Work Order No. □ 72 HOURS OTHER COMPANY for Other Contract Requirements COMPANY

White and Yellow Copies to Lab

Pink to Project Manager

Lab to Return White Copy to Hart Crowser

Gold to Sample Custodian

ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 10, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10609-1) Project.

Samples were received on *June 09, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center  $\blacksquare$  2821 152 Avenue NE  $\blacksquare$  Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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## Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10609-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/09/11

AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11

NWTPH-Gx / BTEX		MTH BLK	LCS	E1-S1	E1-S2	E2-S1	E2-S2	E3-S1	E3-S2
Matrix	Soil	<ul> <li>Soil</li> </ul>	Soil						
Date extracted	Reporting	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
Date analyzed	Limits	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd	nd	nd	nd
Gasoline	5.0	. nd		12	nd	nd	nd	nd	nd
<u>BTEX 8021B, µg/kg</u>		•							·
Benzene	20	∕nd	98%	nd	nd	nd	nd	nd	nd
Toluene	50	nd	103%	nd	nd	nd	nd	nd	nd
Ethylbenzene	50	. nd		nd	nd	nd	nd	nd	nd
Xylenes	50	nd			nd	nd	nd	nd	nd
Surrogate recoveries:									
Trifluorotoluene		80%	101%	79%	75%	80%	78%	89%	87%
Bromofluorobenzene		91%	104%	107%	102%	108%	107%	103%	103%

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AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11

Analytical Results									- Dupl
NWTPH-Gx / BTEX		E4-S1	N24-S1	N23-S1	N22-S1	N22-S2	N20-S1	N21-S1	N21-S1
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
Date analyzed	Limits	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
NWTPH-Gx, mg/kg				1					
Mineral spirits/Stoddard	5.0	nd	nd	nd	nd	nd	nd	nd	nd
Gasoline	5.0	nd	13	nd	nd	nd	nd	nd	nd
<u>ВТЕХ 8021В, µg/kg</u>		,						•	
Benzene	20	nd	nd	· nd	nd	nd	nd	320	290
Toluene	50	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	50	nd	70	nd	nd	nd	nd	nd	nd
Xylenes	50	nd	100	nd	nd	nd	nd	nd	nd
Surrogate recoveries:									
Trifluorotoluene		82%	77%	81%	79%	80%	77%	84%	81%
Bromofluorobenzene		104%	110%	105%	103%	91%	1 <u>01%</u>	110%	107%_

AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11

Analytical Results		RPD					MS	MSD	RPD
NWTPH-Gx / BTEX		N21-S1	SP1-S1	SP1-S2	SP1-S3	SP1-S4	E1-S2	E1-S2	E1-S2
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
Date analyzed	Limits	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0		nđ	nd	nd	nd			
Gasoline	5.0		nđ	nd	nd	nd			
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	10%	nd	nd	nd	nd	80%	92%	14%
Toluene	50		nd	nd	nd	nd	70%	76%	9%
Ethylbenzene	50		nd	nd	nd	nd			
Xylenes	50		nd	nd	nd	nd			
Surrogate recoveries:									
Trifluorotoluene			74%	77%	77%	76%	82%	91%	
Bromofluorobenzene			104%	101%	100%	102%	90%	93%	

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AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11
Date received:	06/09/11

Analytical Results								
Moisture, SM2540B	E1-S1	E1-S2	E2-S1	E2-S2	E3-S1	E3-S2	E4-S1	N24-S1
Matrix	Soil							
Date analyzed	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
Moisture, %	23%	26%	21%	18%	21%	16%	21%	22%

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AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11

Analytical Results								
Moisture, SM2540B	N23-S1	N22-S1	N22-S2	N20-S1	N21-S1	SP1-S1	SP1-S2	SP1-S3
Matrix	Soil							
Date analyzed	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11	06/09/11
Moisture, %	21%	17%	19%	19%	16%	19%	18%	16%

AAL Job Number:	A10609-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/09/11

Analytical Results	
Moisture, SM2540B	SP1-S4
Matrix	Soil
Date analyzed	06/09/11
Moisture, %	14%

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Sample Custody Record

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Hart Crowser, Inc. 1910 Fairview Avenue East Seattle, Washington 98102-3699 Phone: 206-324-9530 FAX: 206-328-5581

Samp	ole Cust	ody R	ecord			(						1910 Fairv	iew Avenue East
	nipped to:				PC.	OFZ	H	<b>ARTCRO</b>	NSER	ŀ			gton 98102-3699 X: 206-328-5581
JOB 17433-05 LAB NUMBER PROJECT NAME CTHE LENORA HART CROWSER CONTACT JULIE WOKELIC						Brex	REQUEST	ED ANALYSIS		ERS			
PROJECT	NAME	64.11	E LENORA		B				CONTAINERS	OBSER	ATIONS/CO	MMENTS/	
	D BY: WDN	-	LEWOI	reuc		TPH-Lx				NO. OF CON	COMPO	SITING INST	RUCTIONS
LAB NO.	SAMPLE ID	DESCRIPTIO	ON DATE	TIME	MATRIX								
	EI-SI		6811	0834	SOIL	X				2	5mL 1	VOA +	402 JATR
	EI-SZ		1	0839	SUIL	1				1		1	
	E2-51			1408	1								
	EZ-SZ			141)									
	E3-51			1002				_					
	E3-52			1001	V				-				
	E4-51			1415						1			
	N24-51 N23-51		V	1347			-						
	NZ2-SI			1235					_	N			
	NZZ-SZ			1233			_			V		A	
	N20-51			1340		A							
RELINQU	ISHED BY	DATE	RECEIVED BY	1-10	DATE	SPECIAL SHIPN	MENT HAND	LING OR		24	TOTAL NU	IMBER OF C	ONTAINERS
SIGNATUR	by	6811	V. Svam SIGNATURE VAL SVA	NN	06/09/1 TIME	STORAGE REQ				SAMPLE RECEIPT INFORMATION CUSTODY SEALS:			
PRINT NAME     COMPANY     PRINT NAME       COMPANY     1757     COMPANY       RELINQUISHED BY     DATE     RECEIVED BY								GOOD CONDITION  YES NO TEMPERATURE SHIPMENT METHOD: HAND					
		DATE	-				and the second second second second						
SIGNATUR	-		CICNATURE			COOLER NO .:		STORAGE LC	CATION:		IAROUND TIME:		
SIGNATUR		TIME	SIGNATURE		TIME					K		1 WEEK	
PRINT NAM			PRINT NAME			See Lab Work						STANDARD	
COMPANY			COMPANY			for Other Cont	ract Require	ments		72 HOURS OTHER			

White and Yellow Copies to Lab

Pink to Project Manager

## Sample Custody Record

2 OF Z HARTCROWSER

Harr crowser, mic. 1910 Fairview Avenue East Seattle, Washington 98102-3699 Phone: 206-324-9530 FAX: 206-328-5581

JOB 17433-05 LAB NUMBER PROJECT NAME GTH + LENGRA HART CROWSER CONTACT JULIE WUKENC					REQUESTED ANALYSIS		INERS	
		HE WL	FEL		744-6×/1		OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS	
SAMPLED BY: WDM					41		Z	
LAB NO. SAMPLE ID	DESCRIPTIC		TIME	MATRIX				
NZL-SI		68/11	0821	Soule	×		2 5MLVOAT 402 AR	
SPI-SI		48/11	1628		×			
		11.	1632		1			
SPI-SZ SPI-S3			1633					
571-54			1636			1		
		V		J				
		w		V				
		· .						
					1			
RELINQUISHED	DATE	RECEIVED_BY		DATE	SPECIAL SHIPMENT HANDLING OR		TOTAL NUMBER OF CONTAINERS	
	6/8/11 TIME			( )	STORAGE REQUIREMENTS:		SAMPLE RECEIPT INFORMATION CUSTODY SEALS:	
COMPANY		COMPANY 900					GOOD CONDITION VES NO TEMPERATURE HAND	
RELINQUISHED BY DATE RECEIVED BY DATE								
SIGNATURE		SIGNATURE			COOLER NO.: STORAGE LOC		URNAROUND TIME:	
PRINT NAME	TIME		See Lab Work Order No.		24 HOURS  1 WEEK  48 HOURS  STANDARD			
COMPANY	_	COMPANY			for Other Contract Requirements		□ 72 HOURS OTHER	

Pink to Project Manager
ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 20, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10616-6) Project.

Samples were received on *June 16, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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#### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10616-6 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/16/11

AAL Job Number:	A10616-6
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/16/11

Analytical Results							MS	MSD	RPD
NWTPH-Gx / BTEX		MTH BLK	LCS	T5-1	T5-2	T5-3	T5-3	T5-3	T5-3
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11
Date analyzed	Limits	06/16/11	06/16/11	06/16/11	06/16/11	06/16/1 <u>1</u>	06/16/11	06/16/11	06/16/11
NWTPH-Gx, mg/kg Mineral spirits/Stoddard	5.0	nd		nd	nd	nd			
Gasoline	5.0	nd		nd		nd			
	0.0								
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	nd	106%	nd	79	230	101%	115%	13%
Toluene	50	nd	95%	nd	nd	nd	113%	110%	2%
Ethylbenzene	50	nd		nd	nd	nd			
Xylenes	50	nd		nd	nd	nd			
Surrogate recoveries:									
Trifluorotoluene		71%	83%	114%	103%	95%	109%	122%	
Bromofluorobenzene		74%	79%	114%	110%	115%	121%	112%	

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number:	
Date received:	06/16/11

Analytical Results	i					Dupl
NWTPH-Dx, mg/kg		MTH BLK	T5-1	T5-2	T5-3	T5-3
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11
Date analyzed	Limits	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11
		•				
Kerosene/Jet fuel	20	nd	nd	nđ	nd	nd
Diesel/Fuel oil	· 20	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd
Surrogate recoveries:						
Fluorobiphenyl		114%	109%	110%	109%	107%
o-Terphenyl		111%	104%	105%	104%	101%
•						

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits C - coelution with sample peaks Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

AAL Job Number: Client:	A10616-6 Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	
Date received:	06/16/11

Analytical Results							Dupl	RPD
Metals (7010/7471),	mg/kg	MTH BLK	LCS	T5-1	T5-2	T5-3	T5-3	T5-3
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11
Date analyzed	Limits	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11	06/16/11
Lead (Pb)	1.0	nd	103%	6.2	5.1	4.2	4.1	3%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed M- matrix interference Results reported on dry-weight basis Acceptable Recovery limits: 70% TO.130% Acceptable RPD limit: 30%

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AAL Job Number:	A10616-6
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/16/11

Analytical Results			
Moisture, SM2540B	T5-1	T5-2	T5-3
Matrix	Soil	Soil	Soil
Date analyzed	06/17/11	06/17/11	06/17/11
Moisture. %	22%	24%	20%

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## Sample Custody Record

A10616-6



Harc Gowser, ..... 1910 Fairview Avenue East Seattle, Washington 98102-3699 Phone: 206-324-9530 FAX: 206-328-5581

mples Shippe	ed to:/	AAL								H	ART	CR	OW	SER		Phone: 206-324-9530 FAX: 206-328-5
JOB/ PROJECT NA HART CROW SAMPLED BY			NUMBER nora ter Sm;	Itez		0-411	-J-Hot	BREX	Riter	QUEST	ED ANA	LYSIS			NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
AB NO. S	SAMPLE ID	DESCRIPTIC	DN DATE	TIME	MATRIX											
	-1		6/16/11		SOIL		X	x	X						1	1-402
	5-2			1025	L	X	X	XX	X						1	.1
														-		
ELINQUISH	ED BY	DATE	RECEIVED BY		<b>DATE</b>	SP	ECIA	L SHI	PMEN	HANDI	LING OF	2			3	TOTAL NUMBER OF CONTAINERS
GNATURE BINT NAME OMPANY	Loidyl	G/16/11 TIME 1130	SIGNATURE PRINT NAME LI, COMPANY		16/11 (2: TIME	ST	ORAC	GE RE	QUIRE	MENTS:			ryhe	•		MPLE RECEIPT INFORMATION JSTODY SEALS: YES NO NA DOD CONDITION YES NO EMPERATURE HIPMENT METHOD: HAND
RELINQUISH	ED BY	DATE	RECEIVED BY		DATE											COURIER DOVERNIGHT
SIGNATURE		TIME	SIGNATURE PRINT NAME		TIME			R NO.				STORA	GE LOC	ATION:		24 HOURS   1 WEEK     48 HOURS   STANDARD
PRINT NAME			COMPANY						k Ordentract	r No Require	ments					72 HOURS OTHER ASAP

ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 20, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10617-1) Project.

Samples were received on *June 17, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center  $\blacksquare$  2821 152 Avenue NE  $\blacksquare$  Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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#### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10617-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/17/11

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AAL Job Number:	A10617-1	
Client:	Hart Crowser, Inc.	
Project Manager:	Julie Wukelic	
Client Project Name:	6th & Lenora	
Client Project Number:	17433-05	
Date received:	06/17/11	

Analytical Results			_						Dupl
NWTPH-Gx / BTEX		MTH BLK	· LCS	TP-23	TP-24	TP-25	TP-26	SP-1S	SP-1S
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11
Date analyzed	Limits	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nď		nd	nd	nd	nd	nd	nd
Gasoline	5.0	nd		nđ	nd	nd	nd	nd	nd
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	· 20	nď	81%	nd	nd	nd	nd	nd	nd
Toluene	50	nđ	77%	nd	nd	nd	nd	nd	nd
Ethylbenzene	50	nd		nd	nd	, nd	nd	nd	nd
Xylenes	50	nd		nd	nd	nd	nd	nd	nd
Surrogate recoveries:									,
Trifluorotoluene		93%	70%	92%	89%	88%	90%	92%	98%
Bromofluorobenzene		75%		103%	102%	99%	102%	103%	107%

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Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

A10617-1
Hart Crowser, Inc.
Julie Wukelic
6th & Lenora
17433-05
06/17/11

P-1S	SP-1S
Soil	Soil
17/11	06/17/11
17/11	06/17/11
82% 86%	36% 5%
	J
80%	
1	Soil 7/11 7/11 82% 86% 76%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

#### Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

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A10617-1
Hart Crowser, Inc.
Julie Wukelic
6th & Lenora
17433-05
06/17/11

Analytical Results					
Moisture, SM2540B	TP-23	TP-24	TP-25	TP-26	SP-1S
Matrix	Soil	Soil	Soil	Soil	Soil
Date analyzed	06/17/11	06/17/11	06/17/11	06/17/11	06/17/11
Moisture, %	22%	16%	21%	23%	17%

### Sample Custody Record

A1061+-1



Ha )ws 1910 Fairview Avenue East Seattle, Washington 98102-3699 Phone: 206-324-9530 FAX: 206-328-5581

Samples Shipped to: Advanced Analytical

JOB 17433-05 LAB NUMBER						REQUESTED ANALYSIS	- x			
						*		OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS		
HART CROWSER CONTACT Julie Whitelic SAMPLED BY: Jesse Overson					UwTPH-B4x	COMPOSITING INSTRUCTIONS				
AB NO.	SAMPLE ID	DESCRIPTIC		TIME	MATRIX	21				
AD INU.	TP-23		6/16/11	832	MAINA	~		1 NWTPH-Blex		
	TP-24	soil	eneri	836		x		North-Dick of		
	TP-25			945		x		1		
	TP-26	L	1	1010		X				
	SP-15	soal	6/17/11			X		1		
RELINOU	SHED BY	DATE	RECEIVED-BY		DATE	SPECIAL SHIPMENT HANDLING OR		TOTAL NUMBER OF CONTAINERS		
UNITURE WILLOW OF TIME SIGNATURE WARN OF TIME		06/17/1 TIME 09 00	STORAGE REQUIREMENTS:		SAMPLE RECEIPT INFORMATION CUSTODY SEALS: YES NO N/A GOOD CONDITION YES NO TEMPERATURE SHIPMENT METHOD: HAND					
RELINQUISHED BY DATE RECEIVED BY DATE		DATE		E LOCATION:						
SIGNATURE SIGNATURE TIME TIME		COOLER NO.: STORAG	E LOCATION:	TURNAROUND TIME:						
PRINT NAM	E		PRINT NAME			See Lab Work Order No.		48 HOURS STANDARD		
COMPANY COMPANY		for Other Contract Requirements		□ 72 HOURS OTHER						

ADVANCED ANALYTICAL

Environmental Testing Laboratory

June 21, 2011

Julie Wukelic Hart Crowser, Inc. 1700 Westlake Avenue North, Suite 200 Seattle, WA 98109

Dear Ms. Wukelic:

Please find enclosed the analytical data report for the 6<sup>th</sup> & Lenora, 17433-05 (A10620-1) Project.

Samples were received on *June 20, 2011*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D. Laboratory Manager

Overlake Business Center  $\blacksquare$  2821 152 Avenue NE  $\blacksquare$  Redmond, WA 98052 ph 425.497.0110 fax 425.497.8089 *E-mail: aachemlab@yahoo.com* 

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#### Advanced Analytical Laboratory (425)497-0110, fax(425)497-8089

AAL Job Number: Client: Project Manager: Client Project Name: Client Project Number: Date received: A10620-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/20/11

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AAL Job Number:	A10620-1
Client:	Hart Crowser, Inc.
Project Manager:	Julie Wukelic
Client Project Name:	6th & Lenora
Client Project Number:	17433-05
Date received:	06/20/11

Analytical Results	•					Dupl	MS	MSD	RPD
NWTPH-Gx / BTEX		MTH BLK	LCS	TP-27	TP-28	TP-28	_TP-28	TP-28	TP-28
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11
Date analyzed	Limits	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11	06/20/11
NWTPH-Gx, mg/kg									
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd			
Gasoline	5.0	nd		nd	nd	nd			
<u>ВТЕХ 8021В, µg/kg</u>									
Benzene	20	nd	106%	nd	nd	nd	103%	97%	7%
Toluene	50	nď	88%	nd	nd	nd	97%	97%	1%
Ethylbenzene	50	nd		nd	nd	nd			
Xylenes	50	nd		nd	nd	nd			
Surrogate recoveries:									
Trifluorotoluene		81%	94%	87%	86%	105%	91%	89%	,
Bromofluorobenzene		104%	100%	110%	113%	122%	103%	_104%	

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits na - not analyzed Results reported on dry-weight basis Acceptable Recovery limits: 70% TO 130% Acceptable RPD limit: 30%

#### Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

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Client: H Project Manager: J Client Project Name: 6 Client Project Number: 1	A10620-1 Hart Crowser, Inc. Julie Wukelic 6th & Lenora 17433-05 06/20/11
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Analytical Results	 	
Moisture, SM2540B	TP-27	TP-28
Matrix	 Soil	Soil
Date analyzed	 06/21/11	06/21/11
Moisture, %	22 <u>%</u>	21%

# Sample Custody Record

A10620-1

HARTCROWSER

Harc crowser, mc. 1910 Fairview Avenue East Seattle, Washington 98102-3699 Phone: 206-324-9530 FAX: 206-328-5581

Samples Shipped to: Advance	2 A	maky	tica
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JOB 17433-05 LAB NUMBER PROJECT NAME <u>Com i honorg</u> HART CROWSER CONTACT <u>Julie Wubelic</u> Reter Smiltens SAMPLED BY: <u>Jesse Overton</u> LAB NO SAMPLE D DESCRIPTION DATE THAT MATRIX					REQUESTED ANALYSIS				ALYSIS	S			
										NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS		
LAB NO.	SAMPLE ID	DESCRIPTI	ON DATE	TIME	MATRIX		-						
	TP-27	soil	wized 11	9:35	soil	X						1	
	TP-28	L	L	9:45	1	x						1	
			_										
											_		
											_	_	
				-									
											_		
DELINOU	ISHED BY	DATE	RECEIVED BY		DATE								
RELINGE	ALLED DI		N N	- 1	DATE Date	SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:				R	2 TOTAL NUMBER OF CONTAINERS SAMPLE RECEIPT INFORMATION		
SIGNATUR	0	ecolu	SIGNATURE		/	STORAGE REQUIREMENTS.					CU	ISTODY SEALS:	
PRINT NAM	Overlan	TIME			TIME 1000							GO DY TEM	YES NO NA DOD CONDITION YES NO MPERATURE
RELINQU	ISHED BY	DATE	RECEIVED BY		DATE	1							IPMENT METHOD: HAND COURIER OVERNIGHT
						CO	OOLER NO .:			STORAG	E LOCATION:	TUR	RNAROUND TIME:
SIGNATURE TIME TIME			TIME							X	24 HOURS 🗆 1 WEEK		
PRINT NAM	1E		PRINT NAME			See Lab Work Order No.				48 HOURS			
COMPANY			COMPANY			for	r Other Contra	act Requi	rements				72 HOURS OTHER
White and Yel	ow Copies to Lab	Pink to Proje	ect Manager L	ab to Return W	White Copy to Ha	rt Crow	wser Gold	to Sample (	ustodian				

### APPENDIX D SCALE TICKETS CEMEX

Hart Crowser 17433-05 October 31, 2011

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and ora ject



### Ticket List By Customer\Order\Product



Date From	m	06/02/2011				
Location	(s)	1876				
Order:	408	40907				

To 06/02/2011

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Older.	40848987	Contracting to Street				0	0	M
Date	TicketNo	Delivery Address	Vehicle	Timeln	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
Scale Ti	ckets VEST CONSTRUCTI	ON INC (WA)					300.21	24		
40840907 1192508								a Transs		
6/2/11	1876052709	76:2105 6TH AVE.	1876-4, EVERETT SOIL GENERIC	7:53:00	8:12:00	24.11	TON			
6/2/11	1876052710	76:2105 6TH AVE.	1876-5, EVERETT SOIL GENERIC	8:04:00	8:18:00	18.81	TON			
6/2/11	1876052711	76:2105 6TH AVE.	1876-6, EVERETT SOIL GENERIC	8:18:00	8:23:00	20.13	TON			
6/2/11	1876052712	76:2105 6TH AVE.	1876-2, EVERETT SOIL GENERIC	8:16:00	8:28:00	17.91	TON			
6/2/11	1876052713	76:2105 6TH AVE.	1876-1, EVERETT SOIL GENERIC	8:31:00	8:48:00	19.95	TON			
6/2/11	1876052714	76:2105 6TH AVE.	CASH1876-1,SOILS CASH	9:29:00	9:38:00	20.95	TON			
6/2/11	1876052715	76:2105 6TH AVE.	1876-4, EVERETT SOIL GENERIC	0:00:00	9:55:00	22.78	TON			
6/2/11	1876052716	76:2105 6TH AVE.	1876-5, EVERETT SOIL GENERIC	0:00:00	10:04:00	22.62	TON			
6/2/11	1876052717	76:2105 6TH AVE.	1876-2, EVERETT SOIL GENERIC	0:00:00	10:14:00	17.90	TON			
6/2/11	1876052718	76:2105 6TH AVE.	1876-6, EVERETT SOIL GENERIC	0:00:00	10:16:00	20.42	TON			
6/2/11	1876052719	76:2105 6TH AVE.	1876-1, EVERETT SOIL GENERIC	0:00:00	10:17:00	19.36	TON			
6/2/11	1876052721	76:2105 6TH AVE.	CASH1876-1,SOILS CASH	0:00:00	11:00:00	22.03	TON			
6/2/11	1876052722	76:2105 6TH AVE.	1876-4, EVERETT SOIL GENERIC	0:00:00	11:34:00	23.87	TON			
6/2/11	1876052723	76:2105 6TH AVE.	1876-5, EVERETT SOIL GENERIC	0:00:00	11:39:00	23.82	TON			
6/2/11	1876052724	76:2105 6TH AVE.	1876-2, EVERETT SOIL GENERIC	0:00:00	11:43:00	18.95	TON			
6/2/11	1876052725	76:2105 6TH AVE.	1876-6, EVERETT SOIL GENERIC	0:00:00	11:51:00	21.80	TON			
6/2/11	1876052726	76:2105 6TH AVE.	1876-1, EVERETT SOIL GENERIC	0:00:00	11:53:00	19.36	TON			
6/2/11	1876052727	76:2105 6TH AVE.	CASH1876-1,SOILS CASH	0:00:00	12:28:00	23.57	TON			
6/2/11	1876052730	76:2105 6TH AVE.	1876-4, EVERETT SOIL GENERIC	0:00:00	13:17:00	25.82	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S	o i
6/2/11	1876052731	76:2105 6TH AVE.	1876-5, EVERETT SOIL GENERIC	0:00:00	13:22:00	24.11	TON		
6/2/11	1876052732	76:2105 6TH AVE.	1876-1, EVERETT SOIL GENERIC	0:00:00	13:29:00	20.06	TON		
6/2/11	1876052733	76:2105 6TH AVE.	1876-2, EVERETT SOIL GENERIC	0:00:00	13:31:00	17.81	TON		
6/2/11	1876052734	76:2105 6TH AVE.	1876-6, EVERETT SOIL GENERIC	0:00:00	13:38:00	22.17	TON		
6/2/11	1876052736	76:2105 6TH AVE.	CASH1876-1,SOILS CASH	0:00:00	14:10:00	23.21	TON		
6/2/11	1876052740	76:2105 6TH AVE.	1876-4, EVERETT SOIL GENERIC	0:00:00	15:04:00	24.30	TON		
6/2/11	1876052741	76:2105 6TH AVE.	1876-5, EVERETT SOIL GENERIC	0:00:00	15:08:00	23.88	TON		
6/2/11	1876052742	76:2105 6TH AVE.	1876-1, EVERETT SOIL GENERIC	0:00:00	15:17:00	20.15	TON		
6/2/11	1876052743	76:2105 6TH AVE.	1876-2, EVERETT SOIL GENERIC	0:00:00	15:23:00	20.00	TON		
6/2/11	1876052744	76:2105 6TH AVE.	1876-6, EVERETT SOIL GENERIC	0:00:00	15:24:00	23.39	TON		
Product 1 Order Tot Custome	tals 29				Qty Qty Qty	623. 623. 623.	24 TON		
Grand To	otal	29			Qty	623.24	TON		

## Ticket List By Customer\Order\Product



 Date From
 06/16/2011

 Location(s)
 1876

 Order:
 40840907

To 06/16/201	1
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Date	TicketNo	Delivery Address	Vehicle	Timeln	TicketTime	Qty	Unit	S h i	C a s	V o i
Scale Tic	ويتعانك فكالعا وأنفاعت							p	h	d
40840907 1192508										
6/16/11	1876052824	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	7:49:00	23.36	TON			
6/16/11	1876052825	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	7:46:00	7:58:00	24.40	TON	R		
6/16/11	1876052826	76:2105 6TH AVE.	NWC50T,NORTHWEST CONSTRUC	7:56:00	8:11:00	28.45	TON			
6/16/11	1876052827	76:2105 6TH AVE.	NWC46T,NORTHWEST CONSTRUC	8:03:00	8:15:00	27.55	TON			
6/16/11	1876052828	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	8:06:00	8:18:00	25.18	TON			
6/16/11	1876052829	76:2105 6TH AVE.	NWC34T,NORTHWEST CONSTRUC	8:09:00	8:22:00	26.03	TON			
6/16/11	1876052830	76:2105 6TH AVE.	NWC48T,NORTHWEST CONSTRUC	8:18:00	8:30:00	26.66	TON			
6/16/11	1876052831	76:2105 6TH AVE.	NWC35T,NORTHWEST CONSTRUC	8:20:00	8:32:00	27.16	TON			
6/16/11	1876052832	76:2105 6TH AVE.	NWC36T,NORTHWEST CONSTRUC	8:23:00	8:37:00	22.55	TON			
6/16/11	1876052833	76:2105 6TH AVE.	HAY9T, HAYTER TRUCKING	0:00:00	8:38:00	23.06	TON			
6/16/11	1876052834	76:2105 6TH AVE.	HAY8T, HAYTER TRUCKING	0:00:00	8:39:00	23.57	TON			
6/16/11	1876052836	76:2105 6TH AVE.	1876-3, EVERETT SOIL GENERIC	9:15:00	9:30:00	23.25	TON			
6/16/11	1876052838	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	0:00:00	9:52:00	27.10	TON			
6/16/11	1876052839	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	9:54:00	26.19	TON			
6/16/11	1876052841	76:2105 6TH AVE.	NWC50T,NORTHWEST CONSTRUC	0:00:00	9:58:00	28.48	TON			
6/16/11	1876052842	76:2105 6TH AVE.	NWC46T,NORTHWEST CONSTRUC	0:00:00	10:09:00	27.66	TON			
6/16/11	1876052843	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	0:00:00	10:11:00	29.25	TON			
6/16/11	1876052844	76:2105 6TH AVE.	NWC34T,NORTHWEST CONSTRUC	0:00:00	10:16:00	28.65	TON			
6/16/11	1876052845	76:2105 6TH AVE.	NWC48T,NORTHWEST CONSTRUC	0:00:00	10:20:00	27.12	TON			

Date         TicketNo         Delivery Address         Vehicle         TimeIn         TicketTime         Cdy         Unit         p         h           6/16/11         1876052846         76.2105 6TH AVE.         NWC35T.NORTHWEST CONSTRUC         0:00:00         10:24:00         23.37         TON           6/16/11         1876052847         76:2105 6TH AVE.         HAYST.HAYTER TRUCKING         0:00:00         10:31:00         24.35         TON           6/16/11         1876052840         76:2105 6TH AVE.         HAYST.HAYTER TRUCKING         0:00:00         10:31:00         24.36         TON           6/16/11         1876052845         76:2105 6TH AVE.         HAYST.HAYTER TRUCKING         0:00:00         11:28:00         26.33         TON           6/16/11         1876052852         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         11:48:00         26.43         TON           6/16/11         1876052855         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         11:48:00         26.33         TON           6/16/11         1876052856         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         11:48:00         27.40         TON           6/16/11         1876052856         76:2105 6TH AVE	Date								S h i	C a s	V o i
6/16/11         1876952847         76:2105 6TH AVE.         NWC36T.NORTHWEST CONSTRUC         0:00:00         10:27:00         24:35         TON           6/16/11         1876952848         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:00:00         10:31:00         24:36         TON           6/16/11         1876952849         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:00:00         10:32:00         23:48         TON           6/16/11         1876952850         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         11:28:00         26:33         TON           6/16/11         1876952853         76:2105 6TH AVE.         NWC42T.NORTHWEST CONSTRUC         0:00:00         11:38:00         26:80         TON           6/16/11         1876952855         76:2105 6TH AVE.         NWC42T.NORTHWEST CONSTRUC         0:00:00         11:48:00         27:40         TON           6/16/11         1876952856         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         11:49:00         31:23         TON           6/16/11         1876952857         76:2105 6TH AVE.         NWC43T.NORTHWEST CONSTRUC         0:00:00         12:40:00         38:85         TON           6/16/11         1876952858         76:2105 6TH AVE.	Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	р	h	d
6/16/11       1876052848       762105 6TH AVE.       HAY9T,HAYTER TRUCKING       0.0.00       10.31.00       24.36       TON         6/16/11       1876052849       76.2105 6TH AVE.       HAY8T,HAYTER TRUCKING       0.00.00       10.32.00       23.46       TON         6/16/11       1876052850       76.2105 6TH AVE.       1876-3.EVERETT SOIL GENERIC       0.00.00       11.30.00       26.33       TON         6/16/11       1876052853       76.2105 6TH AVE.       NWC42T.NORTHWEST CONSTRUC       0.00.00       11.30.00       26.80       TON         6/16/11       1876052854       76.2105 6TH AVE.       NWC45T.NORTHWEST CONSTRUC       0.00.00       11.40.00       21.42       TON         6/16/11       1876052855       76.2105 6TH AVE.       NWC45T.NORTHWEST CONSTRUC       0.00.00       11.44.00       21.42       TON         6/16/11       1876052856       76.2105 6TH AVE.       NWC33T.NORTHWEST CONSTRUC       0.00.00       11.44.00       31.22       TON         6/16/11       1876052857       76.2105 6TH AVE.       NWC48T.NORTHWEST CONSTRUC       0.00.00       12.44.00       33.85       TON         6/16/11       1876052850       76.2105 6TH AVE.       NWC48T.NORTHWEST CONSTRUC       0.00.00       12.44.00       31.25       TON	6/16/11	1876052846	76:2105 6TH AVE.	NWC35T,NORTHWEST CONSTRUC	0:00:00	10:24:00	29.37	TON			
6/16/11         1876052849         762105 6TH AVE.         HAY8T,HAYTER TRUCKING         0.0000         10.32:00         23.46         TON           6/16/11         1876052850         76:2105 6TH AVE.         1876-3.EVEREIT SOIL GENERIC         0.0000         11.28:00         26.33         TON           6/16/11         1876052852         76:2105 6TH AVE.         NWC43T,NORTHWEST CONSTRUC         0.0000         11.30:00         26.83         TON           6/16/11         1876052853         76:2105 6TH AVE.         NWC42T,NORTHWEST CONSTRUC         0.0000         11.30:00         26.80         TON           6/16/11         1876052854         76:2105 6TH AVE.         NWC42T,NORTHWEST CONSTRUC         0.00:00         11.40:00         27.40         TON           6/16/11         1876052856         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0.00:00         11.40:00         31.23         TON           6/16/11         1876052857         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0.00:00         12.04:00         31.83         TON           6/16/11         1876052850         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0.00:00         12.14:00         27.60         TON           6/16/11         1876052861         76:2105 6TH AVE.	6/16/11	1876052847	76:2105 6TH AVE.	NWC36T,NORTHWEST CONSTRUC	0:00:00	10:27:00	24.35	TON			
6/16/11       1876052850       76:2105 6TH AVE.       1876-3.EVERETT SOLL GENERIC       0:00:00       10:50:00       21.77       TON         6/16/11       1876052852       76:2105 6TH AVE.       NWC43T NORTHWEST CONSTRUC       0:00:00       11:28:00       26.33       TON         6/16/11       1876052853       76:2105 6TH AVE.       NWC42T NORTHWEST CONSTRUC       0:00:00       11:30:00       26.80       TON         6/16/11       1876052854       76:2105 6TH AVE.       NWC40T NORTHWEST CONSTRUC       0:00:00       11:40:00       27.40       TON         6/16/11       1876052856       76:2105 6TH AVE.       NWC33T NORTHWEST CONSTRUC       0:00:00       11:40:00       31.23       TON         6/16/11       1876052856       76:2105 6TH AVE.       NWC33T NORTHWEST CONSTRUC       0:00:00       11:40:00       31.23       TON         6/16/11       1876052858       76:2105 6TH AVE.       NWC43T NORTHWEST CONSTRUC       0:00:00       12:24:00       33.85       TON         6/16/11       1876052860       76:2105 6TH AVE.       NWC43T NORTHWEST CONSTRUC       0:00:00       12:14:00       27.50       TON         6/16/11       1876052861       76:2105 6TH AVE.       NWC43T NORTHWEST CONSTRUC       0:00:00       12:14:00       27.57 <td< td=""><td>6/16/11</td><td>1876052848</td><td>76:2105 6TH AVE.</td><td>HAY9T, HAYTER TRUCKING</td><td>0:00:00</td><td>10:31:00</td><td>24.36</td><td>TON</td><td></td><td></td><td></td></td<>	6/16/11	1876052848	76:2105 6TH AVE.	HAY9T, HAYTER TRUCKING	0:00:00	10:31:00	24.36	TON			
6/16/11         1876052852         76:2105 6TH AVE.         NWC43T NORTHWEST CONSTRUC         0:00:00         11:28:00         26:33         TON           6/16/11         1876052853         76:2105 6TH AVE.         NWC42T NORTHWEST CONSTRUC         0:00:00         11:30:00         26:80         TON           6/16/11         1876052854         76:2105 6TH AVE.         NWC40T NORTHWEST CONSTRUC         0:00:00         11:35:00         30:67         TON           6/16/11         1876052855         76:2105 6TH AVE.         NWC40T NORTHWEST CONSTRUC         0:00:00         11:44:00         27:40         TON           6/16/11         1876052856         76:2105 6TH AVE.         NWC43T NORTHWEST CONSTRUC         0:00:00         11:49:00         31:23         TON           6/16/11         1876052867         76:2105 6TH AVE.         NWC43T NORTHWEST CONSTRUC         0:00:00         12:09:00         31:28         TON           6/16/11         1876052869         76:2105 6TH AVE.         NWC3ST NORTHWEST CONSTRUC         0:00:00         12:09:00         31:28         TON           6/16/11         1876052861         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:00:00         12:19:00         25:75         TON           6/16/11         1876052863         76:2105 6TH AVE.	6/16/11	1876052849	76:2105 6TH AVE.	HAY8T, HAYTER TRUCKING	0:00:00	10:32:00	23.46	TON			
6/16/11       1876052853       76:2105 6TH AVE.       NWC42T NORTHWEST CONSTRUC       0:00:00       11:30:00       26.80       TON         6/16/11       1876052854       76:2105 6TH AVE.       NWC50T,NORTHWEST CONSTRUC       0:00:00       11:40:00       27.40       TON         6/16/11       1876052855       76:2105 6TH AVE.       NWC45T,NORTHWEST CONSTRUC       0:00:00       11:40:00       31.23       TON         6/16/11       1876052856       76:2105 6TH AVE.       NWC33T,NORTHWEST CONSTRUC       0:00:00       11:40:00       31.23       TON         6/16/11       1876052857       76:2105 6TH AVE.       NWC34T,NORTHWEST CONSTRUC       0:00:00       11:40:00       33.85       TON       R         6/16/11       1876052859       76:2105 6TH AVE.       NWC46T,NORTHWEST CONSTRUC       0:00:00       12:04:00       33.85       TON       R         6/16/11       1876052860       76:2105 6TH AVE.       HAY9T,HAYTER TRUCKING       0:00:00       12:09:00       31.28       TON         6/16/11       1876052861       76:2105 6TH AVE.       HAY9T,HAYTER TRUCKING       0:00:00       12:19:00       25.75       TON         6/16/11       1876052863       76:2105 6TH AVE.       NWC43T,NORTHWEST CONSTRUC       0:00:00       13:03:00	6/16/11	1876052850	76:2105 6TH AVE.	1876-3, EVERETT SOIL GENERIC	0:00:00	10:50:00	21.77	TON			·
6/16/11         1876052854         76:2105 6TH AVE.         NWC50T,NORTHWEST CONSTRUC         0:0:00         11:35:00         30.67         TON           6/16/11         1876052855         76:2105 6TH AVE.         NWC4ST,NORTHWEST CONSTRUC         0:0:00         11:4:00         27.40         TON           6/16/11         1876052856         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0:0:00         11:4:00         31.23         TON           6/16/11         1876052857         76:2105 6TH AVE.         NWC48T,NORTHWEST CONSTRUC         0:0:00         11:4:00         31.25         TON           6/16/11         1876052859         76:2105 6TH AVE.         NWC48T,NORTHWEST CONSTRUC         0:0:00         12:0:00         31.28         TON           6/16/11         1876052860         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0:0:00         12:0:00         31.28         TON           6/16/11         1876052861         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:0:0:00         12:19:00         25.75         TON           6/16/11         1876052862         76:2105 6TH AVE.         NWC43T,NORTHWEST CONSTRUC         0:0:0:0         13:0:3:0         34.32         TON           6/16/11         1876052865         76:2105 6TH AVE. <t< td=""><td>6/16/11</td><td>1876052852</td><td>76:2105 6TH AVE.</td><td>NWC43T,NORTHWEST CONSTRUC</td><td>0:00:00</td><td>11:28:00</td><td>26.33</td><td>TON</td><td></td><td></td><td></td></t<>	6/16/11	1876052852	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	0:00:00	11:28:00	26.33	TON			
6/16/11       1876052855       76.2105 6TH AVE.       NWC46T.NORTHWEST CONSTRUC       0.00.00       11.44.00       27.40       TON         6/16/11       1876052856       76.2105 6TH AVE.       NWC34T.NORTHWEST CONSTRUC       0.00.00       11.49.00       31.23       TON         6/16/11       1876052857       76.2105 6TH AVE.       NWC34T.NORTHWEST CONSTRUC       0.00.00       11.54.00       31.22       TON         6/16/11       1876052859       76.2105 6TH AVE.       NWC34T.NORTHWEST CONSTRUC       0.00.00       12.04.00       33.85       TON       R         6/16/11       1876052850       76.2105 6TH AVE.       NWC35T.NORTHWEST CONSTRUC       0.00.00       12.04.00       31.28       TON         6/16/11       1876052860       76.2105 6TH AVE.       NWC35T.NORTHWEST CONSTRUC       0.00.00       12.04.00       31.28       TON         6/16/11       1876052861       76.2105 6TH AVE.       HAY9T.HAYTER TRUCKING       0.00.00       12.14.00       27.61       TON         6/16/11       1876052862       76.2105 6TH AVE.       HAY8T.HAYTER TRUCKING       0.00.00       12.28.00       28.19       TON         6/16/11       1876052863       76.2105 6TH AVE.       NWC43T.NORTHWEST CONSTRUC       0.00.00       13.03.00       34.32	6/16/11	1876052853	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	11:30:00	26.80	TON			
6/16/11         1876052856         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0:00:00         11:49:00         31.23         TON           6/16/11         1876052857         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0:00:00         11:54:00         31.22         TON           6/16/11         1876052858         76:2105 6TH AVE.         NWC48T,NORTHWEST CONSTRUC         0:00:00         12:04:00         33.85         TON         R           6/16/11         1876052859         76:2105 6TH AVE.         NWC33T,NORTHWEST CONSTRUC         0:00:00         12:04:00         31.28         TON           6/16/11         1876052860         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:00:00         12:14:00         27.60         TON           6/16/11         1876052861         76:2105 6TH AVE.         HAY9T,HAYTER TRUCKING         0:00:00         12:19:00         25.75         TON           6/16/11         1876052862         76:2105 6TH AVE.         HAY8T,HAYTER TRUCKING         0:00:00         12:28:00         28.19         TON           6/16/11         1876052863         76:2105 6TH AVE.         NWC43T,NORTHWEST CONSTRUC         0:00:00         13:00         34.32         TON           6/16/11         1876052864         76:2105 6TH AV	6/16/11	1876052854	76:2105 6TH AVE.	NWC50T,NORTHWEST CONSTRUC	0:00:00	11:35:00	30.67	TON			
6/16/11187605285776:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0011:54:0031.22TON6/16/11187605285876:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0012:04:0033.85TONR6/16/11187605285976:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0012:14:0027.60TON6/16/11187605286076:2105 6TH AVE.HAY9T,HAYTER TRUCKING0:00:0012:14:0027.60TON6/16/11187605286276:2105 6TH AVE.HAY8T,HAYTER TRUCKING0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286476:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC40T,NORTHWEST CONSTRUC0:00:0013:01:0034.35TONR6/16/11187605286776:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:31:0035.13TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605	6/16/11	1876052855	76:2105 6TH AVE.	NWC46T,NORTHWEST CONSTRUC	0:00:00	11:44:00	27.40	TON			
6/16/11187605285876:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0012:04:0033.85TONR6/16/11187605285976:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0012:09:0031.28TON6/16/11187605286076:2105 6TH AVE.HAY9T,HAYTER TRUCKING0:00:0012:19:0025.75TON6/16/11187605286176:2105 6TH AVE.HAY8T,HAYTER TRUCKING0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:59:0030.73TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286476:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC40T,NORTHWEST CONSTRUC0:00:0013:03:0035.13TONR6/16/11187605286776:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TONR6/16/11187605286976:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TON6/16/11187605	6/16/11	1876052856	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	0:00:00	11:49:00	31.23	TON			
6/16/11187605285976:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0012:09:0031.28TON6/16/11187605286076:2105 6TH AVE.HAY9T,HAYTER TRUCKING0:00:0012:14:0027.60TON6/16/11187605286176:2105 6TH AVE.HAY8T,HAYTER TRUCKING0:00:0012:19:0025.75TON6/16/11187605286276:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286476:2105 6TH AVE.NWC42T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:00:0035.13TONR6/16/11187605286776:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:30:0034.32TONR6/16/11187605286976:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:30:0035.13TONR6/16/11187605286976:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:30:0031.13TON6/16/11187605287076:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:30:0033.13TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105	6/16/11	1876052857	76:2105 6TH AVE.	NWC34T,NORTHWEST CONSTRUC	0:00:00	11:54:00	31.22	TON			
6/16/11187605286076:2105 6TH AVE.HAY9T,HAYTER TRUCKING0:00:0012:14:0027.60TON6/16/11187605286176:2105 6TH AVE.HAY8T,HAYTER TRUCKING0:00:0012:19:0025.75TON6/16/11187605286276:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0012:59:0030.73TON6/16/11187605286476:2105 6TH AVE.NWC42T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC40T,NORTHWEST CONSTRUC0:00:0013:01:0035.13TONR6/16/11187605286576:2105 6TH AVE.NWC40T,NORTHWEST CONSTRUC0:00:0013:31:0035.13TONR6/16/11187605286776:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:31:0034.31TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.<	6/16/11	1876052858	76:2105 6TH AVE.	NWC48T,NORTHWEST CONSTRUC	0:00:00	12:04:00	33.85	TON	R		
6/16/11187605286176:2105 6TH AVE.HAY8T,HAYTER TRUCKING0:00:0012:19:0025.75TON6/16/11187605286276:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0012:59:0030.73TON6/16/11187605286476:2105 6TH AVE.NWC42T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:12:0034.36TONR6/16/11187605286776:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:30:0035.13TONR6/16/11187605286876:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:31:0034.31TON6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH A	6/16/11	1876052859	76:2105 6TH AVE.	NWC35T,NORTHWEST CONSTRUC	0:00:00	12:09:00	31.28	TON			
6/16/11187605286276:2105 6TH AVE.1876-3,EVERETT SOIL GENERIC0:00:0012:28:0028.19TON6/16/11187605286376:2105 6TH AVE.NWC43T,NORTHWEST CONSTRUC0:00:0012:59:0030.73TON6/16/11187605286476:2105 6TH AVE.NWC42T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC50T,NORTHWEST CONSTRUC0:00:0013:12:0034.36TONR6/16/11187605286776:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:30:0035.13TONR6/16/11187605286876:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TON6/16/11187605287076:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287176:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6	6/16/11	1876052860	76:2105 6TH AVE.	HAY9T, HAYTER TRUCKING	0:00:00	12:14:00	27.60	TON			
6/16/11       1876052863       76:2105 6TH AVE.       NWC43T,NORTHWEST CONSTRUC       0:00:00       12:59:00       30.73       TON         6/16/11       1876052864       76:2105 6TH AVE.       NWC42T,NORTHWEST CONSTRUC       0:00:00       13:03:00       34.32       TON       R         6/16/11       1876052865       76:2105 6TH AVE.       NWC50T,NORTHWEST CONSTRUC       0:00:00       13:12:00       34.36       TON       R         6/16/11       1876052867       76:2105 6TH AVE.       NWC40T,NORTHWEST CONSTRUC       0:00:00       13:30:00       35.13       TON       R         6/16/11       1876052868       76:2105 6TH AVE.       NWC30T,NORTHWEST CONSTRUC       0:00:00       13:30:00       34.36       TON       R         6/16/11       1876052869       76:2105 6TH AVE.       NWC33T,NORTHWEST CONSTRUC       0:00:00       13:31:00       34.26       TON       R         6/16/11       1876052869       76:2105 6TH AVE.       NWC34T,NORTHWEST CONSTRUC       0:00:00       13:33:00       33.13       TON       TON         6/16/11       1876052870       76:2105 6TH AVE.       NWC34T,NORTHWEST CONSTRUC       0:00:00       13:53:00       32.21       TON         6/16/11       1876052871       76:2105 6TH AVE.       NWC35T	6/16/11	1876052861	76:2105 6TH AVE.	HAY8T, HAYTER TRUCKING	0:00:00	12:19:00	25.75	TON			
6/16/11187605286476:2105 6TH AVE.NWC42T,NORTHWEST CONSTRUC0:00:0013:03:0034.32TONR6/16/11187605286576:2105 6TH AVE.NWC50T,NORTHWEST CONSTRUC0:00:0013:12:0034.36TONR6/16/11187605286776:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:30:0035.13TONR6/16/11187605286876:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TONR6/16/11187605287076:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:53:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:58:0028.29TON	6/16/11	1876052862	76:2105 6TH AVE.	1876-3, EVERETT SOIL GENERIC	0:00:00	12:28:00	28.19	TON			
6/16/11       1876052865       76:2105 6TH AVE.       NWC50T,NORTHWEST CONSTRUC       0:00:00       13:12:00       34.36       TON       R         6/16/11       1876052867       76:2105 6TH AVE.       NWC46T,NORTHWEST CONSTRUC       0:00:00       13:30:00       35.13       TON       R         6/16/11       1876052868       76:2105 6TH AVE.       NWC33T,NORTHWEST CONSTRUC       0:00:00       13:30:00       34.26       TON       R         6/16/11       1876052869       76:2105 6TH AVE.       NWC34T,NORTHWEST CONSTRUC       0:00:00       13:33:00       33.13       TON       R         6/16/11       1876052870       76:2105 6TH AVE.       NWC48T,NORTHWEST CONSTRUC       0:00:00       13:33:00       33.13       TON       F         6/16/11       1876052871       76:2105 6TH AVE.       NWC35T,NORTHWEST CONSTRUC       0:00:00       13:53:00       32.21       TON       F         6/16/11       1876052871       76:2105 6TH AVE.       NWC35T,NORTHWEST CONSTRUC       0:00:00       13:54:00       33.11       TON         6/16/11       1876052872       76:2105 6TH AVE.       NWC36T,NORTHWEST CONSTRUC       0:00:00       13:58:00       28.29       TON	6/16/11	1876052863	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	0:00:00	12:59:00	30.73	TON			
6/16/11187605286776:2105 6TH AVE.NWC46T,NORTHWEST CONSTRUC0:00:0013:30:0035.13TONR6/16/11187605286876:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TONF6/16/11187605287076:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TONF6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TONF6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TONF6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:58:0028.29TON	6/16/11	1876052864	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	13:03:00	34.32	TON	R		
6/16/11187605286876:2105 6TH AVE.NWC33T,NORTHWEST CONSTRUC0:00:0013:31:0034.26TONR6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TON6/16/11187605287076:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:58:0028.29TON	6/16/11	1876052865	76:2105 6TH AVE.	NWC50T,NORTHWEST CONSTRUC	0:00:00	13:12:00	34.36	TON	R		
6/16/11187605286976:2105 6TH AVE.NWC34T,NORTHWEST CONSTRUC0:00:0013:33:0033.13TON6/16/11187605287076:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:58:0028.29TON	6/16/11	1876052867	76:2105 6TH AVE.	NWC46T,NORTHWEST CONSTRUC	0:00:00	13:30:00	35.13	TON	R		
6/16/11187605287076:2105 6TH AVE.NWC48T,NORTHWEST CONSTRUC0:00:0013:53:0032.21TON6/16/11187605287176:2105 6TH AVE.NWC35T,NORTHWEST CONSTRUC0:00:0013:54:0033.11TON6/16/11187605287276:2105 6TH AVE.NWC36T,NORTHWEST CONSTRUC0:00:0013:58:0028.29TON	6/16/11	1876052868	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	0:00:00	13:31:00	34.26	TON	R		
6/16/11       1876052871       76:2105 6TH AVE.       NWC35T,NORTHWEST CONSTRUC       0:00:00       13:54:00       33.11       TON         6/16/11       1876052872       76:2105 6TH AVE.       NWC36T,NORTHWEST CONSTRUC       0:00:00       13:58:00       28.29       TON	6/16/11	1876052869	76:2105 6TH AVE.	NWC34T,NORTHWEST CONSTRUC	0:00:00	13:33:00	33.13	TON			
6/16/11 1876052872 76:2105 6TH AVE. NWC36T,NORTHWEST CONSTRUC 0:00:00 13:58:00 28.29 TON	6/16/11	1876052870	76:2105 6TH AVE.	NWC48T,NORTHWEST CONSTRUC	0:00:00	13:53:00	32.21	TON			
	6/16/11	1876052871	76:2105 6TH AVE.	NWC35T,NORTHWEST CONSTRUC	0:00:00	13:54:00	33.11	TON			
6/16/11 1876052873 76:2105 6TH AVE. HAY9T,HAYTER TRUCKING 0:00:00 13:59:00 28.39 TON	6/16/11	1876052872	76:2105 6TH AVE.	NWC36T,NORTHWEST CONSTRUC	0:00:00	13:58:00	28.29	TON			
	6/16/11	1876052873	76:2105 6TH AVE.	HAY9T, HAYTER TRUCKING	0:00:00	13:59:00	28.39	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
6/16/11	1876052874	76:2105 6TH AVE.	HAY8T, HAYTER TRUCKING	0:00:00	14:00:00	27.42	TON			
6/16/11	1876052878	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	0:00:00	14:11:00	26.98	TON			
6/16/11	1876052879	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	0:00:00	14:42:00	32.65	TON	R		
6/16/11	1876052880	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	14:44:00	31.59	TON			
6/16/11	1876052881	76:2105 6TH AVE.	NWC50T,NORTHWEST CONSTRUC	0:00:00	14:55:00	34.13	TON	R		
6/16/11	1876052882	76:2105 6TH AVE.	NWC46T,NORTHWEST CONSTRUC	0:00:00	15:16:00	29.90	TON			
6/16/11	1876052883	76:2105 6TH AVE.	NWC33T,NORTHWEST CONSTRUC	0:00:00	15:18:00	30.52	TON			
6/16/11 Product T Order Tota Customer	als 53	76:2105 6TH AVE.	NWC34T,NORTHWEST CONSTRUC	0:00:00	15:23:00 Qty Qty Qty	32.20 1,508. 1,508. 1,508.	62 TO	N		
Grand Tot	tal	53			Qty	1,508.6	2 TON			



# Ticket List By Customer\Order\Product



 Date From
 06/17/2011
 To

 Location(s)
 1876

 Order:
 40840907

06/17/2011	
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Date	TicketNo	Delivery Address	Vehicle	Timeln	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
Scale Tick NORTHWE 40840907 1192508	kets EST CONSTRUCTIO	DN INC (WA)								
6/17/11	1876052887	76:2105 6TH AVE.	NWC43T,NORTHWEST CONSTRUC	0:00:00	7:44:00	32.45	TON	R		
6/17/11 Product To Order Tota Customer	als 2	76:2105 6TH AVE.	NWC42T,NORTHWEST CONSTRUC	0:00:00	7:50:00 Qty Qty Qty	31.48 63.9 63.9 63.9	3 TON			
Grand Tota	al	2			Qty	63.93	TON			